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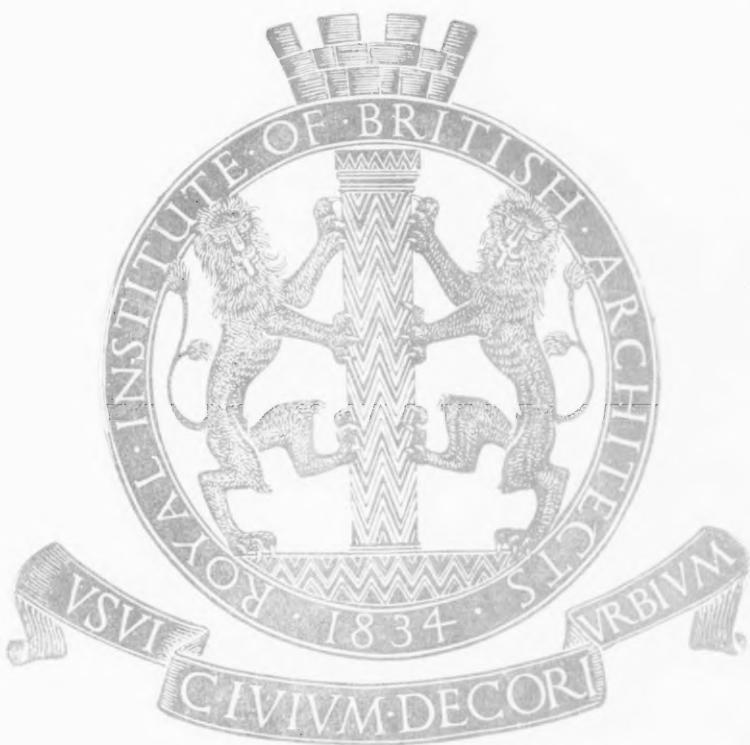
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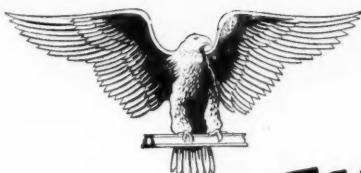
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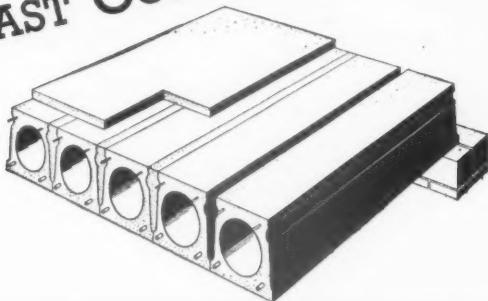
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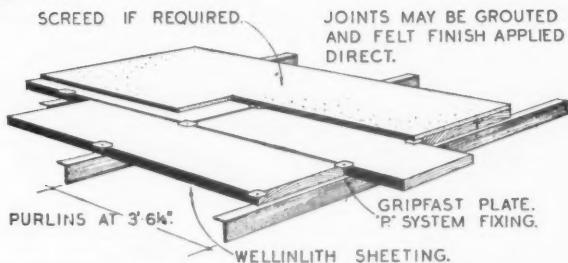
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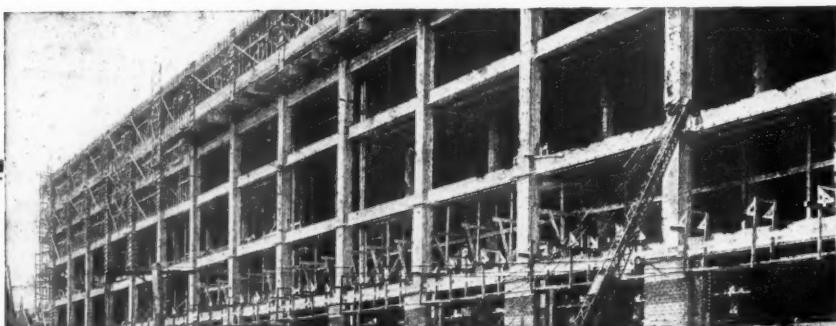
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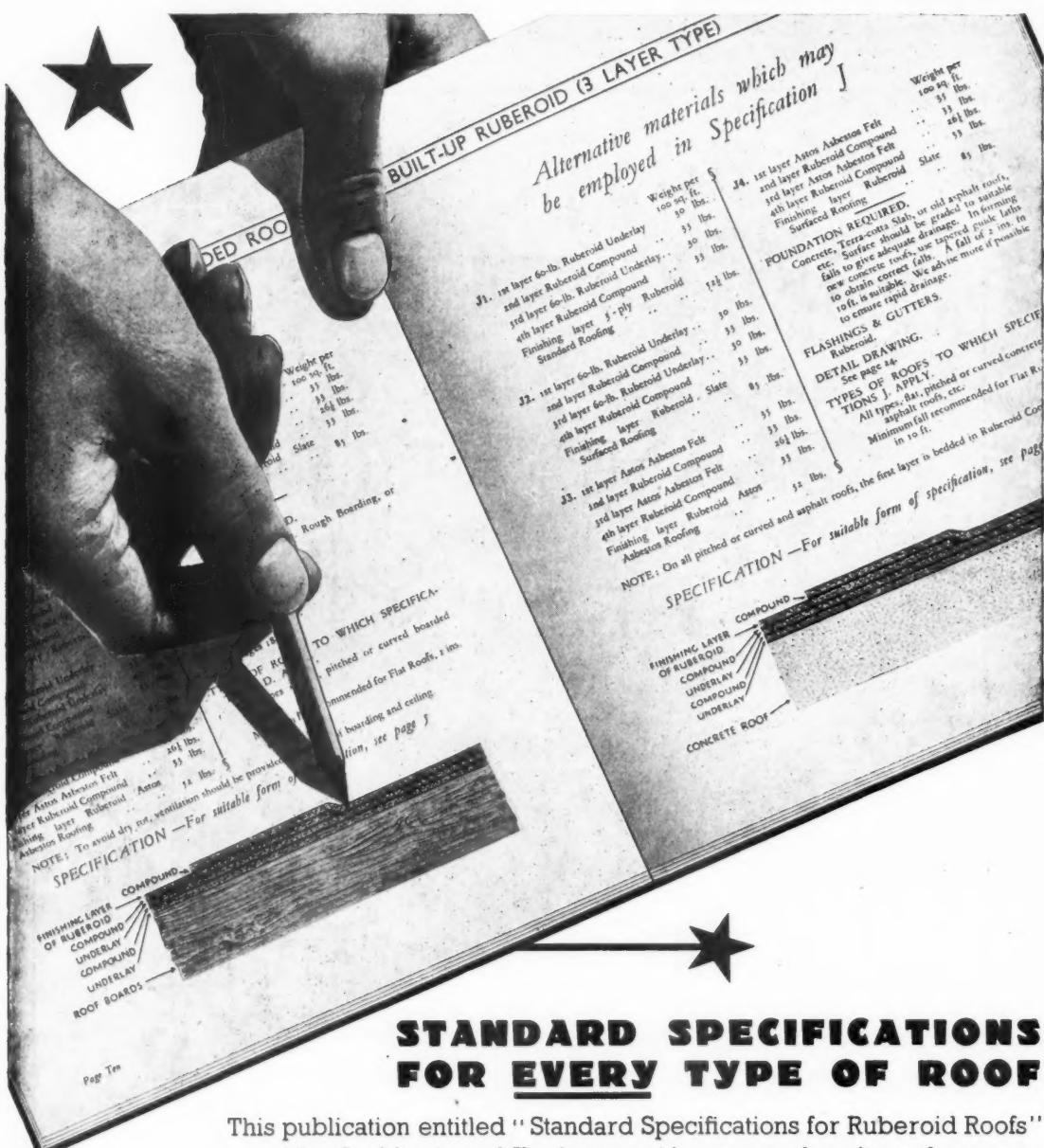
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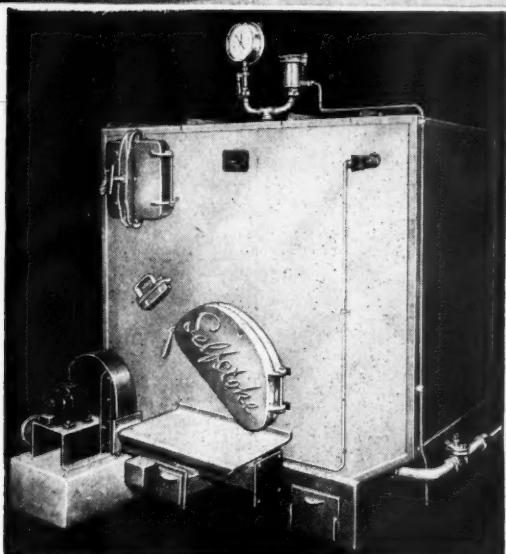
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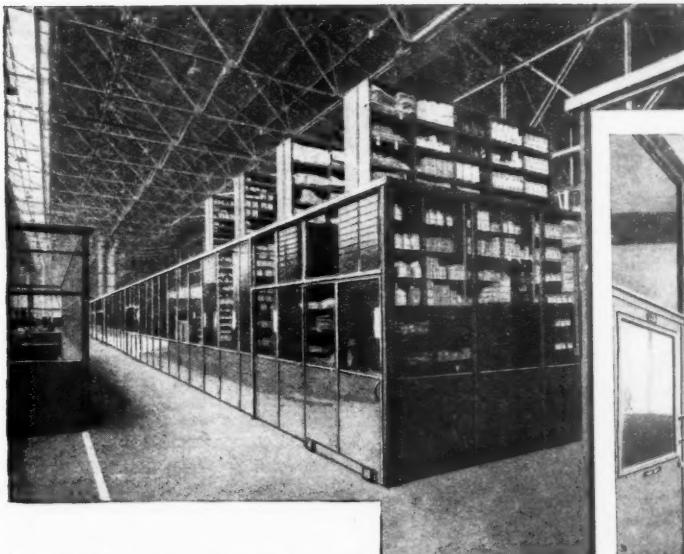
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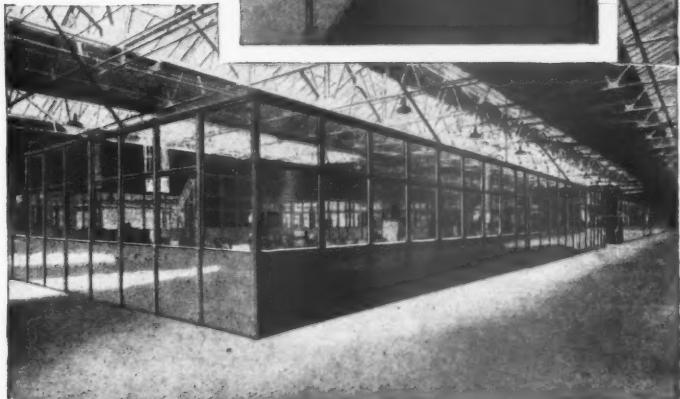
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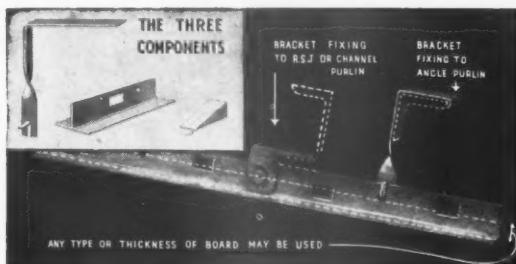
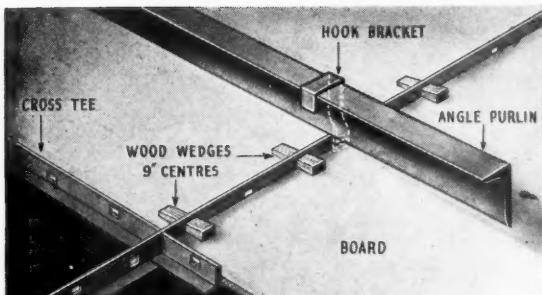


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# JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

3rd Series]

[Vol. 50

No. 5

MARCH, 1943

*Sir William and Lady Beveridge at the opening of the "Rebuilding Britain" Exhibition at the National Gallery, 25 February.*



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## Journal

### THE EXHIBITION

Some 1,200 people attended the opening ceremony of the "Rebuilding Britain" Exhibition on 25 February. A full report of the speeches at the opening appears elsewhere in this issue. Since then there has been a very good daily attendance.

The Exhibition will remain on view at the National Gallery until 1 May and will then be shown at the Royal Exchange, London, for six or seven weeks before going to Manchester and touring the country under the auspices of C.E.M.A.

There is an alteration in the times of showing published in the last JOURNAL. The Exhibition is now open until 6 p.m. (not 5 p.m.), Fridays until 6.30 p.m.

The first of the lectures arranged in connection with the Exhibition was held at the National Gallery on Saturday, 6 March, when an audience of about 150 heard Dr. Julian Huxley speak on "Why We Must Plan," followed on Saturday, 13 March, by Professor Eva Taylor, who spoke on "Mapping 'What is' and Planning 'What might be.'". Further lectures in the series are being held at the National Gallery on Saturday afternoons, at 2.30 p.m., as announced in the February JOURNAL.

### EXHIBITION PUBLICATIONS

There has been a great demand for the book *Rebuilding Britain* and in view of the limited number of copies available, those wishing to buy a copy are advised to do so at an early date.

The book is on sale, price 3s. 6d., at the Exhibition, or can be obtained direct from the publishers, Messrs. Lund, Humphries and Co., Ltd., or any bookseller.

The *Architectural Review* is also producing a book in connection

with the Exhibition—*Towards a New Britain*—profusely illustrated with photographs from the Exhibition and containing a special message from the President.

This will be on sale at the Exhibition early in April and will probably cost 1s.

### MEMBERS OF THE R.I.B.A. AND THE CENTRAL REGISTER

In the JOURNAL of November, 1940, it was necessary to draw attention to the difficulties caused by members who fail to notify the R.I.B.A. and the Central Register Department of the Ministry of Labour and National Service when they obtain work and no longer wish their names to be submitted for appointments.

It has been the practice since the beginning of the war to make a special note on the Central Register cards of those who have stated that they are in urgent need of work and such members are given priority when openings occur. In connection with a number of recent Government appointments for which adequate salaries were offered, the names submitted were all of members who had asked the Institute to try to find them appointments quickly, but twenty-seven out of sixty did not even trouble to reply when approached by the Central Register Department of the Ministry. Others had accepted appointments in Government departments but had not advised the R.I.B.A. that their names should be taken off the list of those available for immediate employment.

Without the co-operation of members it is impossible for the Central Register or for the R.I.B.A. to keep its lists up to date, and members cannot expect their names to be submitted for appointments if they do not trouble to answer letters.

## CONFERENCE ON INDUSTRIAL HEALTH

The Minister of Labour and National Service, the Right Hon. Ernest Bevin, is holding a Conference on Industrial Health on April 9, 10 and 11, at the Caxton Hall. The general purpose of the Conference is to emphasise the importance of industrial health and to elicit suggestions for promoting it.

The Minister anticipates that members of the R.I.B.A. will wish to participate in the Conference. An endeavour will be made to find room for all who are interested, and tickets may be available on application to the Secretary of the Conference, Ministry of Labour and National Service, 28, Broadway, S.W.1.

## THE ASHPITEL PRIZE, 1942

The Ashpitel Prize, which is a Prize of books to the value of £20, awarded to the candidate who, taking the Final Examination to qualify as an Associate, shall most highly distinguish himself among the candidates in the Final Examinations of the year, has been awarded to Mr. Lawrence Albert Butterfield [A.].

## PROFESSOR A. E. RICHARDSON

Professor A. E. Richardson [F.], A.R.A., has been elected Master of the Art Workers' Guild.

## R.I.B.A. ARCHITECTURAL SCIENCE BOARD

The R.I.B.A. Architectural Science Board has been reconstituted and the following have been appointed and have agreed to serve on the Board for the present Session :—

Joseph Addison, M.C. [F.]; Professor J. D. Bernal, F.R.S.; E. L. Bird, M.C. [A.]; Professor L. B. Budden, M.A. [F.]; P. V. Burnett [F.]; A. R. Cobb, M.A.; A. W. Davson, F.S.I.; I. G. Evans, M.A.; A. Farquharson, M.A.; R. Fitzmaurice, B.Sc., A.M.Inst.C.E. (Hon. A.); J. H. Forshaw, M.C. [F.]; Miss J. D. Ledebor [A.]; Alister G. MacDonald [F.]; J. L. Manson, H.M.I., B.Sc.; Sir Edward Mellanby, K.C.B., F.R.S., F.R.C.P., M.A., M.D.; Mrs. J. Robinson, M.A.; Major the Hon. Godfrey Samuel [A.]; R. Sheppard [A.]; C. G. Stillman [F.]; Professor W. N. Thomas, D.Phil., M.Inst.C.E. [F.]; J. K. Winser [A.]; W. A. Wort, P.A.S.I.

The Board has appointed Mr. Alister MacDonald, Major the Hon. Godfrey Samuel and Mr. W. A. Wort as Chairman, Vice-Chairman and Acting Hon. Secretary respectively.

## BOOKS FOR PRISONERS OF WAR

Since the inception, some three months ago, of the R.I.B.A. scheme to provide books for prisoners of war from all sections of the Building Industry, well over 3,000 books have already been sent to the prison camps in Germany and Italy.

At present, special consignments are in preparation for hospital camps. There will be books touching on the lighter side of architecture and building, but the parcels will also contain books of a non-technical nature, which, it is felt, in the circumstances will be greatly appreciated by convalescing men.

Amongst generous donors to the fund are the employees of Sir Robert McAlpine who, not to be outdone by the gift of £100 from the head of the firm, have collected amongst themselves over £600 to be spent on gifts of books for their less fortunate comrades in prison camps.

Mr. R. Coppock, Secretary of the National Federation of Building Trades Operatives, is to be heartily congratulated on making it possible for these large consignments to be sent out, thus helping to stock camp libraries with a wide range of books on architecture, surveying and all branches of the Building Industry.

## THE INSTITUTION OF CIVIL ENGINEERS

Members of the R.I.B.A. will be welcomed at a meeting of the Structural and Building Engineering Division of the Institution of Civil Engineers to be held at 12, Great George Street, S.W.1, on 4 May, at 5.30 p.m., when a Paper on "The Provision of Heat in Buildings," by Professor Sir Alfred Egerton, F.R.S., will be discussed. Applications for invitation cards should be addressed to the Institution.

## RUSSIAN ARCHITECTS AND THE R.I.B.A.

The following cablegram addressed to the R.I.B.A. has been received from Professor D. E. Arkin of Moscow (Honorary Corresponding Member) :—

*Like many Russian architects I have long been desirous of exchanging with you and staff of R.I.B.A. JOURNAL certain views on our wartime work and learning opinions on Anglo-Russian co-operation in our particular field.*

*Architecture first among muses said to be silenced when guns speak. That was usually case in former wars. But during this war Russian architecture has continued to live intensive creative life. Not only are architects working in Red Army as military engineers, camouflage experts and commanders of engineer troops, they are also carrying on many-sided defence work in rear.*

*Dismantling, transferring and reassembling of immense number of works and factories far into country's interior—Siberia, Urals, Central Asia—was one of the biggest economic and strategic wartime undertakings and had to be done in shortest possible time. Industrial population needed new dwellings, schools, hospitals, dining rooms, nurseries. Best building forces of country undertook work and many new settlements sprang into being in various parts of Urals, Eastern Siberia, Central Asia Republics.*

*Main idea was to manage without transportation of materials because transport was needed for army freight arms and ammunition. Local available materials had to be utilised.*

*In addition to mass construction work in East, architects are preparing for restoration of liberated cities and villages ruined by German occupation army. Special groups are engaged on plans for these in Moscow Academy of Architecture. New towns, hundreds of collective farm villages will be built anew on their ashes. Vast and responsible indeed is task confronting Russian architects—to raise upon heroic ruins of Stalingrad new city wherein joy and comfort of living will be best memorial to those who laid down their lives fighting for it.*

*Soviet architects intend to make extensive use of their British colleagues' experience and are following work of Royal Institute very attentively in military construction, town planning and reconstruction. I think that many of our tasks and problems will be identical with those facing our British comrades.*

*In this connection I would like as historian of architecture to point out that relations between architects of both countries have traditions dating back to 18th and 17th centuries.*

*Russian architects place very high England's finest examples of classic architecture and particularly achievements of great British builders in designs for dwelling houses and settlement planning. For their part Soviet architects have accumulated during last two decades wealth of experience in town planning and reconstruction. I think that regular exchange of opinions and knowledge gained by experience would prove extremely useful.*

*German invaders have barbarously destroyed number of most precious architectural monuments—monasteries in Novy Jerusalem and Istra Palaces built by famous 18th century architect Matvei Kazakov in town of Kalinin, ancient temples at Novgorod and Chernigov. They took away wonderful fountains from Peterhof and ruined Palace.*

*Many great edifices did Hitlerites wantonly damage and destroy in England—Cathedrals of Canterbury and Exeter, innumerable London churches designed by Christopher Wren, Guildhall, Holland House and other classic examples of English architecture. Both Soviet and British architects are and will be engaged on restoration work for some time to come.*

*Soviet Architects Union has been in close touch with Royal Institute and with other British architectural associations for many years now and connections are being extended and deepened. Open meetings of Soviet architects will shortly be held in Moscow on subject of contemporary architecture in Great Britain. Some time ago I had honour of reading paper on classic and contemporary architecture in England to crowded auditorium in Moscow Architects' Club. Many other measures have been planned for acquainting Russian public with styles of English architecture. We would be glad to acquaint British architects with best examples of Russian architecture past and present. Yours sincerely, D. ARKIN.*

The following reply has been sent :—

*Council of Royal Institute of British Architects have received your cablegram with great pleasure.*

*They reciprocate with the utmost enthusiasm the sentiments which you express and they will do everything in their power to bring about the close co-operation which you suggest between the architectural professions in the U.S.S.R. and the United Kingdom and to arrange for the constant interchange of information. A further communication will follow.*

W. H. ANSELL, President R.I.B.A.

## APPOINTMENT

The Estates Committee of "The London Estates of the Governors of Sutton's Hospital in Charterhouse" recently appointed Mr. Ernest W. Spiller, F.S.I. [L.], as their Surveyor in place of Mr. A. Burnett Brown, F.S.I. [F.], who has retired, but whose services are being retained by the Committee in a consultative capacity.

# THE OPENING OF THE "REBUILDING BRITAIN" EXHIBITION

BY SIR WILLIAM BEVERIDGE, K.C.B.

The R.I.B.A. Exhibition, "Rebuilding Britain," was opened by Sir William Beveridge, K.C.B., at the National Gallery on Thursday, 25 February, at 2.30 p.m. The President, Mr. W. H. Ansell, M.C., presided. Sir Kenneth Clark welcomed Sir William Beveridge and the R.I.B.A. Exhibition on behalf of the Trustees of the National Gallery.

**THE PRESIDENT :** Ladies and Gentlemen, I am to-day in the pleasant position of having an easy and delightful task to perform, that of introducing one who needs no introduction, whose name, indeed, has become a household word among us: none other than Sir William Beveridge, who has most generously consented to open officially the Exhibition of "Rebuilding Britain." But before I ask him to address you, there are a few things I must say about the Exhibition and the way it came about.

When the Reconstruction Committee of the R.I.B.A. had been working a couple of years or so, it was suggested that an exhibition should be arranged to give visual expression to the Committee's views on the Britain which was possible in the future. It was clear that the cost of such an enterprise was far beyond the means of the R.I.B.A. We therefore called a meeting of the building industry federations of master builders and of operatives, specialists and manufacturers of everything from the concrete of the foundations to the felts, asphaltes and tiles of the roof. At that meeting, which was largely attended by representatives of the associations, I put the project before them as fairly as I could. "Here," I said, "is a proposal that you should give financial backing to, a scheme which I can guarantee with the utmost confidence will bring in no tangible profits or dividends whatever. It will not even be a good advertisement for any individual association or firm, for the whole thing will be anonymous."

One might have thought, from the unruffled calm of those hard-headed business men that this kind of proposal was a daily occurrence with them. Nobody blenched. There was even enthusiasm for the somewhat quixotic idea of shouldering this burden, and the immediate result was that the building industry guaranteed the very considerable cost of such an exhibition. The final result you see here to-day.

The difficulties, however, were not over even when the financial obstacles were overcome.

Where was the Exhibition to be held? The ideal place was obvious, but could it be hoped for? The National Gallery. Here Sir Kenneth Clark proved a friend indeed. His good offices with the Trustees and his powers as Director were freely exercised on our behalf, and these rooms were placed at the disposal of the Exhibition Committee.

Sir Kenneth did more than that. He joined the Committee and his knowledge and advice have been of the greatest possible help to the enterprise.

To those who provided the funds and to Sir Kenneth Clark who provided the accommodation our grateful thanks are due.

The Exhibition, when you see it, will, I am sure, speak for itself. The book which has been published will explain some of the underlying principles governing its design.

I would ask you to bear in mind that the building industry, in which the architects are included, does not set itself up as an Olympian power to tell the nation the kind of life it ought to live. The industry is a part of the nation—it is its own life that is concerned—it takes its share with every other section of the nation in determining the general shape and ideals of life, but

when those have been determined, then the designing and the physical creation of the environment of the life should be the work of the building industry.

The nation is entitled to the finest plan and design, the best practicable construction, and the highest quality craftsmanship, whether of the machine or the hand, in all its replanning and rebuilding work. The Exhibition, I am sure, will show you how high ideals may be combined with intensely practical factors for the good of the community.

And this explains the presence of Sir William Beveridge this afternoon. As the exponent of a great scheme for the provisions of some of the freedoms for which we are fighting, freedom from want and freedom from disease, freedom from squalor, he is intensely interested in the surroundings which shall make a reasonable and healthy life possible, and we, for our part, wish to impress on the planning, design and construction of everyday surroundings that inherent orderliness and beauty which make for the creation of fine building and fine architecture, so that the higher needs of mankind shall be ministered to as well as the material ones.

I now call on Sir William Beveridge to address you and to declare the Exhibition open.

**SIR WILLIAM BEVERIDGE :** In the Report on Social Insurance and Allied Services of which, I am afraid, some of you may have heard, I urged that organisation of Social Insurance should be treated as one part only of a comprehensive policy of social progress. Social insurance is, or should be, an attack on Want. But Want is one only of five giant evils which have to be attacked and, so far as possible, destroyed in the making of New Britain after the war. The other giant evils are Disease, Ignorance, Squalor and Idleness.

I am delighted as well as honoured at having been asked to open this Exhibition to-day because it gives me the chance of saying a few words about one of those other giants—the giant Squalor. They won't be quite so many words as the 160,000 words which I wrote recently about Want. By Squalor I mean the conditions under which so many of our people are forced to live—in houses too small and inconvenient and ill-equipped, impossible to keep clean by any reasonable amount of labour, too thick upon the ground, too far from work or country air. This Exhibition is really a declaration of war on Squalor; it points to the things which have to be done in planning town and country, and in building more and better houses, so as to make it possible for all citizens to live in an environment that is healthy, clean and pleasing to all the senses, clear of offence to sight, hearing and smell, giving easy access to work and to recreation alike. That giant Squalor is a formidable giant—far harder to attack than Want—a true Goliath. We shall not bring Goliath to the ground unless we carry all the necessary stones in our sling. What stones must we have?

The first stone is the planned use of land. We must be in a position to ensure that the use of all land in the country is determined according to a national plan, and not just by individual bargaining between two citizens, one owning and one meaning to use a particular piece of land. The use to which any one piece of land is put affects all the neighbours and may affect the lives of citizens over a large stretch of country. Most important of all is the use of land for the setting up of places of paid employment, whether factories or offices; population will go—must go—where employment calls it. Allowing factories and offices to be located without consideration of where

the workers employed in them are to sleep or eat or shop, of where they can be entertained or educated, or of how they are to get to and from their work, has led to the disastrous, interminable growth of great cities and, in more than one case, has gone far to destroy unique historical beauty. "Planned use of land": that's a short way of putting a tremendous problem. It is easy to say, but far from easy to secure. It involves all those difficult questions as to compensation and finance which are dealt with in the Uthwatt Report and some still more difficult questions for which no solution is proposed even in that Report. Let's have no illusions about the difficulty of dealing with this issue of the use of land. But don't let's run away from the difficulty either—because without planned use of land we can't make a new Britain free from Squalor.

The second stone in our sling must be the sane use of transport. By that I mean using wisely our immense and growing means of transportation of all kinds for men and goods, our roads and railways and aircraft, using these means to spread industry and population healthily, instead of using them to jam more and more people into the great cities and their suburbs. With the sane use of transport goes also the use of power and its distribution; that more than anything else makes it possible to keep land to its best use—to find sites for factories, shops and houses without sacrificing farms and agriculture, without crowding all our industry around our coalfields.

When I told a schoolgirl friend of mine that I was coming to open an exhibition, she said: "I hope it has a Chamber of Horrors." Well, it has. You will see many beautiful things as you go round this Exhibition and you will see some horrors also. I will mention one of these horrors only. You will see it on a small scale of page 38 of the book of the Exhibition, showing the plans of London at four dates, including as the last two dates 1914 and 1939. Please look at those plans and think what they mean. When I came first to London from Oxford to work, I went to live at Toynbee Hall in Whitechapel and I remember that, as I walked about the East-End streets, I used to try to imagine how many miles I and the people around me were from any pleasant country sight or sound—from real country, not a smoke-smudged open space. I remember saying to myself that if I were a super-millionaire, I'd buy up all the unbuilt land for five miles around London and stop all further building in that belt. If London wanted to go on growing, it would have to start again on the other side of the belt. That was in 1904, ten years before the map of 1914. Look at that map and at the map of 1939. How many dismal miles have been added in every direction to the distances from Whitechapel to the green! How much richer a millionaire I'd have to be to do to-day what I imagined nearly forty years ago!

There was a time shortly before this war when Mr. Herbert Morrison, as a leading member of the London County Council, was running a campaign for a green belt round London. At the same time the London Passenger Transport Board was helping to destroy green spaces round London ten times as fast as anyone could preserve them; every time it opened a new station, a new green space was doomed. That's not a sane use of transport. It is not a sane use of transport to make human beings travel for two or three hours every day between their work and their dormitory suburbs rather than spread out the factories and offices and make goods or letters travel instead. It is not a sane use of transport to fix your freights so that there is an advantage in crowding together—rather than spreading out—your towns. Our second stone must be the sane use of transport and of power.

I come to the third stone: the right use of the right architects. Some of you may have been wondering why I have not mentioned architects before in opening this Exhibition which they

have organised. This is not because I think that what architects can do is any less important than what I've named already. It's because their job comes after those jobs in time—it comes after other people, by economic and administrative measures for the planned use of land, and the sane use of transport have brought about a reasonable distribution of industry and population. That alone provides the essential conditions within which architects as architects can work, with satisfaction to themselves and advantage to the community. Dealing with the giant Squalor is not a job for architects only or even mainly. But they have an essential part in the campaign. They must be rightly used and, as I have suggested, must be the right architects. That means that they must be architects even more concerned with the insides than with the outsides of what they design. I say that not through any under-estimate of the importance of the outside, particularly of great public buildings. It is one of the things of which I am most proud that I was associated with the securing of the services of Mr. Holden to design the new University of London building on the site presented by the Rockefeller Foundation. The outside of that makes it one of the great buildings of the world. But there is only one University of London and there are millions of dwelling-houses and hundreds of thousands of places of paid employment, and in all these the inside is more important than the outside. It is on the ingenuity of architects that we shall depend for designing homes in which the persons who work there—that is to say, the housewives—shall have no needless toil, can have their hours of labour shortened and their health preserved. The name of Lord Shaftesbury is associated with our early factory laws, with measures for shortening hours and improving health in factories. Architects should set out to be the Lord Shaftesbrys of the home. That means thinking not only of the walls or roof or the shape and size of the rooms, but of every detail of equipment and its placing. That means thinking of how to make homes not only well but quickly and cheaply. It's important also that those who design homes to-day should realise that they must be birthplaces of the Britons of the future—of more Britons than are being born to-day. If the British race is to continue there must be many families of four or five children. We must design houses not for the one or two-child family, but houses in which large families can be expected to come into existence. The houses that we design and build to-day are the shell in which the British race must live, will be living for, perhaps, 40 or 50 years. We do not want a shell so narrow or uncomfortable for numbers that it kills us. The Victorian era of nurseries without baths and garages, gave way to an era of garages and baths without nurseries. For to-morrow we can aim at all three for all—nurseries, baths and garages.

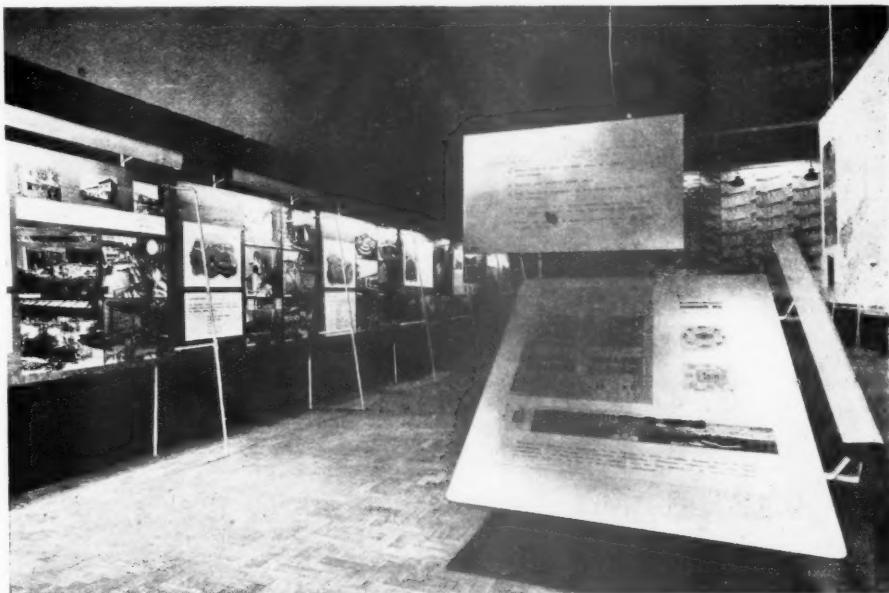
My fourth stone is the maximum efficiency of the building industry. The building industry—both managers and men—should think of themselves as about the most important industry in the country, because on how they do their work depend the lives and the happiness of citizens for many years. Houses, even the worst-built, are lasting. We cannot change them to-morrow if we do not like what we have built to-day, and we cannot get the houses we want without an excessive use of labour in building them unless we have also the maximum of efficiency in building to keep down its costs. A low price for a product doesn't mean low wages for the producers—as is shown by the American automobile industry; it is all a question of efficiency. A low price for a product doesn't mean that it must be ugly; machine-made simple things can be beautiful if they are made to a good design. What a low price for the product means is that everyone can have more of it; cheap plenty of house-room is more important to the race than cheap motor-cars or radio. And that can come by efficiency of design-and execution, of good pay to the producers for high production. I am glad that the holding of this Exhibition has been made possible by the building industry itself, which has met all the expenses involved. That is a most encouraging sign of their desire to serve the public.

These, then, are the four stones which we must put in our sling before we set out to fight the giant Squalor : planned use of land, sane use of transport, right use of the right architects and the maximum of efficiency in the building industry. But it is no use having slings or stones unless you are determined to use them : it is no use declaring war and setting out to fight unless you mean to win, unless you want passionately the things you are fighting for. The drive for dealing with the giant Squalor must come from the people of this country. What they really demand they will get because they themselves will provide it, but they must demand it. I believe that the people of Britain desire social and economic security—freedom from want and idleness—so strongly that they'll be ready to pay all the price of hard work and thought involved in getting them. I hope that they are going to demand as strongly freedom from squalor also ; that they'll come to feel that the conditions of crowding, discomfort, dirt, danger to health and daily exhaustions of travelling to and from work in which we have been content hitherto to let some of our people live are not worthy of Britain for the British. If, as a people, we come to feel that strongly enough we can change those conditions. Now is the opportunity for making the New Britain that we all desire.

Of course, by saying that now is our opportunity I don't mean that now is the time to forget about the war and talk and think chiefly about the peace. The war is not finished yet—far from it ; the winning of the war must come first in all our thoughts and labours. Nor do I mean just the opportunity for physical rebuilding that has been given by the destruction of parts of some of our towns through enemy action. Many people are talking of that, but that opportunity is too small and uneven. The real opportunity of the war is different and greater. The real opportunity lies in our quickened sense of national unity and of the joys of fellowship and service ; in having had to face so many difficulties that seemed overwhelming and having learned that by courage, imagination and hard work we could overcome them. Don't let us forget those lessons. In rebuilding Britain physically as in rebuilding it economically, socially, spiritually, let us try to carry on into the peace the heroic mood of war.

I have pleasure in declaring this Exhibition of "Rebuilding Britain" open. I invite all of you who hear me, not forgetting, not letting up for a moment on the war which we have already against that tottering ogre Hitler, to join in declaring war upon the giant Squalor.

SIR KENNETH CLARK : It is my privilege to welcome on behalf of the Trustees of the National Gallery, both Sir William Beveridge and the R.I.B.A. Exhibition. We have tried throughout the war to make the Gallery a centre of all the arts—music, painting, cookery, and now, thanks to the R.I.B.A., we can include architecture. Perhaps the present Exhibition will seem to some visitors to be more concerned with architecture as a social necessity than with architecture as an art. That is true. You cannot have fine buildings unless you take a conscious pride in them, and with our present social conscience we shall not again be able to take pride in our buildings until we are sure that they provide the possibilities of a good life for everyone. Great building must express a belief—a conviction so widely held as to be unconscious. The archi-



A View of the Exhibition

ture of the Middle Ages expressed belief in God, the architecture of the Renaissance in the god-like qualities of man's intelligence. These beliefs are no longer strong enough to produce great architecture. But we all share one strong belief which earlier ages lacked : that everyone has a right to a certain standard of life ; that no one need be cold, hungry, dirty or diseased through sheer want. In the past these things were thought of as inevitable. We believe that the machine, which so disastrously increased them a century ago, can be used to abolish them to-day. This is the great belief which our architecture must express in order to become beautiful. Beauty in architecture is not a thing which can be produced in a drawing office by means of taste and learning, although heaven knows that taste and learning are not things which the architectural profession can afford to despise. A poet or painter may do fine work in comparative isolation, but architecture is a social art, touching men's lives at a hundred points. In the words of Professor Lethaby, a great building must not be one-man thick ; it must be many-men thick. That is why this Exhibition does not deal with façades, elevation and styles, but with the prerequisites of architecture : needs, plans, materials. I am sure that this is the right approach, but there is a danger in it—materialism. We may become so involved in questions of hot water and sewage disposal that we forget how much people's spirits depend on questions of space, proportion, light—even texture. And we overlook the vital principle of waste—what Ruskin in his *Seven Lamps of Architecture* called the lamp of sacrifice. The imagination requires that certain things should exist for their own sakes—not because they do us any demonstrable good. Such were the towers and pinnacles of the Middle Ages, the volutes and sculptured pediments of the seventeenth century ; but these things cannot simply be stuck on to buildings : they must grow out of them. They must express a need for play which bursts through the wall, or a sense of glory which shoots into the air and defies the laws of gravity. Perhaps it will be a long time before our buildings blossom in this way ; but during the present winter of our architecture let us not try to raise hot-house flowers ; let us rather devote ourselves to winter pursuits, to hedging and ditching, to clearing and drawing. That is why we are proud to welcome here to-day the great

gyrotiller himself—Sir William Beveridge: and for the benefit of non-agricultural listeners I should explain that the gyrotiller is the instrument by which waste land, hopelessly overgrown with weeds and brambles, can be reclaimed for the use of man.

Please do not take my agricultural metaphor too literally. Sir William's speech and the Exhibition itself lays plenty of stress on reasonable use of land. But it is, perhaps, more fitting that a speaker representing the National Gallery should lay his emphasis on design. The buildings of the machine age are going to be more than ever dependent on design. In the past a skilful local craftsman could give distinction to a mediocre design: but when the parts of a building are mass produced and sent out to be put together on some predetermined plan the responsibility placed on the original design becomes very heavy. This is one of those rare occasions where cost doesn't come in. If an object is to be produced in tens of thousands, the cost of the original design is trifling, and manufacturers of building parts

will soon realise that it will pay them to reward designers handsomely. But can the designers be found? Has the general demand for good design been great enough to have produced them? Are we attempting to train them? So may I add this small pebble to the three big ones which Sir William has already promised the giant Squalor—the pebble of the trained designer who can produce the component parts from which the buildings of the machine age must inevitably be constructed. He, no less than the allocation of industry and the construction of roads, is a prerequisite of architecture.

This Exhibition is a complete contrast to the one which has just preceded it, the Exhibition of nineteenth-century French paintings. That appealed to the senses and delighted the eye. This one appeals to the mind and much of what it contains is distressing to the eye; the French Impressionists were a joy in themselves. They left one feeling satisfied, but this Exhibition is an incentive to action and will have failed in its purpose if anyone leaves without a sense of profound dissatisfaction.

## MR. MICHAEL WATERHOUSE'S BROADCAST TO AMERICA

*The following is a letter received by Mr. Michael Waterhouse from the American Institute of Architects:—*

DEAR MR. WATERHOUSE,

It was a great disappointment to me and the members of my family gathered to hear your broadcast to the Architects of America that an approaching thunderstorm interfered with proper reception. We were able to catch occasional phrases, but not until I later read a transcript of a recording of your talk did I get the full import of your message.

The personal sketch with which you introduced the subject of your talk creates a mental picture which would be complete could we have heard your voice without static interference.

We in America have some conception, gleaned from photographs and descriptive writings, of the devastation caused by the bombing of your cities. We marvel at your ability to take it and keep your chins up with teeth gritted, awaiting the day of retaliation which now seems to have arrived. That you should be able to regard this destruction as an opportunity for good in the rebuilding of your cities is evidence of the indomitable spirit of your people which is the admiration of all right thinking persons.

I gather from your address that the architects of Britain are engaged to a greater extent in war construction than are the architects of the United States. The American Institute of Architects finds it necessary to devote much time and effort to the task of overcoming a fixed notion in official circles that one must be an engineer or at least an architect-engineer to be of service in many capacities for which the architect's training has fitted him. Knowing that in Britain the talents of the architectural profession are receiving deserved recognition we are encouraged to believe that eventually the abilities of our architects will be acknowledged and more extensively used in the prosecution of the war in which we are so closely allied.

The personal greetings and good wishes expressed in your broadcast are much appreciated and warmly reciprocated.

Sincerely yours,

CHARLES T. INGHAM,  
Secretary, American Institute of Architects.

*Mr. Waterhouse has sent the following reply:—*

DEAR MR. INGHAM,

Your letter of November 10, telling me of the inaudibility of my broadcast talk owing to a thunderstorm, reached me just before Christmas. That is ancient history, but your letter—and in par-

ticular that part of it which deals with the attitude of official circles in America towards the architect—is of the greatest interest to the whole profession in this country. We had imagined that your country was in that respect more enlightened than our own.

It is sad, but true, that a very large section of our public, who ought to be sufficiently well educated in the knowledge of an architect's capabilities to know better, shares the opinion you describe on the question of the architect and engineer.

It is true also that there is, among many of our members, a feeling of frustration and disappointment that the efforts made by this Institute to offer the services of the profession as a united body to the national cause have met so little apparent success or recognition in official quarters. This, I think, is due to the fact that the immense and indispensable contribution of architects has been more individual than corporate.

Architects practising their craft and exercising their talents to their utmost ability are to be found in every grade and walk of war-life: in the Forces, in the greatly expanded staffs of Ministries and Government departments, and in all the vast network of war production.

Just as building, in one form or another, permeates every part of the social structure, so architects are spread over and are essential to the whole organisation of the nation at war. The work done by this Institute in thus spreading the leaven of professional skill has not been unappreciated by the powers that be.

As to what lies before us. One of our first duties must be to educate the public in the knowledge of the duties and functions of the architect and the indispensable contribution that his skill can give to physical and social reconstruction.

To my own way of thinking the only factors that can convince the world are merit and service.

If we, as individuals, are to succeed in our profession, or the profession as a whole is to take its rightful place, we can only give conviction of our merit to our potential clients by two things: thorough mastery of the full knowledge of our craft; and conscientious thoroughness in our execution of it. May we all do our utmost to deserve and use for the best the opportunities that lie before us.

My very best wishes to you personally, and to brother architects in America.

Yours sincerely,  
MICHAEL WATERHOUSE,  
Hon. Secretary, R.I.B.A.

# THE VILLAGE AND THE SMALL TOWN

ARTHUR W. KENYON, M.T.P.I., [F.]

*A Paper read at the R.I.B.A. on 17 February, as the first in the series of six lectures on Town and Country Planning, arranged by the R.I.B.A. In the Chair, Mr. Basil M. Sullivan, C.I.E., O.B.E., A.M.T.P.I. [F.]*

**In introducing Mr. Kenyon, the Chairman, Mr. Basil M. Sullivan, said :—**

**GENTLEMEN,**

As the lecture we are going to hear this evening is the first of the series, I would like to make, before introducing the lecturer, a few general observations on the position of the architect in relation to town planning and also to explain the object of the lectures. Town planning is now widely discussed ; it is in the news ; it is on the air. But it is nothing new to architects who may justly claim, I think, a major part in putting it on the map in past centuries and in keeping it there ever since.

I am only allowed to speak to you for a few minutes so, probably to your relief, I will not dwell on the earlier centuries with references to St. Peter's and its surroundings at Rome, Wren's plan of London, Regent's Park, Bath and the rest. Starting, however, at the beginning of this century, I would remind you that the Royal Institute of British Architects then appointed a Town Planning Committee to study foreign schemes of town planning and to prepare the way for schemes in Great Britain. It was, therefore, ready to take a leading part and did so when the first Town Planning Bill of 1907 was brought forward by the President of the Local Government Board. When that Bill became an Act in 1909, the Royal Institute organised the Town Planning Conference of 1910 to study the questions involved. To anyone interested in town planning I strongly recommend a study of the transactions of that Conference ; I would like to say a word about it here.

The scope and sweep of the survey undertaken may be realised from the sections into which the papers were collected. They comprised :—

- Cities of the Past.
- Cities of the Present.
- City Development and Extension.
- Cities of the Future.
- Architectural Considerations in Town Planning.
- Special Studies of Town Plans.
- Legislative Conditions and Legal Studies.

There were exhibitions of maps, drawings and models at the Royal Academy, the Guildhall and the Royal Institute galleries. The intervals between listening to and discussing lengthy papers were utilised in study in the galleries or visiting such places as Letchworth, the Hampstead Garden Suburb, Bedford Park, Burnville, Port Sunlight and housing estates most, if not all, designed by architects.

The Conference ended with a banquet presided over by the President of the R.I.B.A., who was supported, as Honorary President of the Conference, by the late Right Hon. John Burns, who was responsible for the Act. Speeches of formidable length were made and, apparently, enjoyed. If, ladies and gentlemen, you read the strenuous doings of that conference, you will come to believe that there were giants in those days.

So much for the Act of 1909, from which the Uthwatt Committee starts in tracing the legislative history of town planning ; not the architectural history which, as I have said, began in past centuries. As members of the R.I.B.A. had taken a major part in the advancement of town planning, so they continued to do in the subsequent formation of the Town Planning Institute, which came into existence in 1914 following the circulation of a letter signed by most of the representative town planners of the day—most of whom were architects.

Following the Act of 1909 came those of 1919, 1923, 1925 and 1932 ; and now we have the Reports of the Scott and Uthwatt Committees which may or may not—we hope they will—become the basis of a further and better Act. In all these efforts architects have continued to play an important part.

In the literature of the subject, work of architects has been more than prominent. I will not develop the matter further for, from what I have said, it is clear that town planning is very much, and always has been, the concern of architects.

Now what is the object of this series of lectures ?

Well, the Royal Institute of British Architects believes that after the war there will be inevitably much town planning of devastated towns and areas as well as all that arising from the natural urge for social betterment which is now so evident. Owing to their basic training and traditional position as town planners, architects will certainly be called upon to tackle problems of town planning as they have in the past. This course of lectures should, therefore, be timely in focusing the attention of all architects upon the importance of the subject, turning the minds of younger architects to the interest and possibilities of this branch of their profession and, possibly, illuminating dark corners for those who are already deeply engaged in it.

Mr. Kenyon, who gives the lecture this evening, is going to deal with Planning the Village and the Small Town. He is well known to us as an architect, as President of the Architectural Association, as Chairman of the London Regional Reconstruction Committee, and as being active in the profession and advancement of town planning.—Mr. Kenyon.

**Mr. Kenyon then read the following paper :—**

I wish to talk this evening as architect to architect. I cannot pose as knowing anything more about this subject of planning villages or towns than you do. I am not going to attempt to be technical in any way ; I only want to take the general view of the subject and point out some of the things to be considered. You will no doubt think of many others, so let me say, right at the beginning, that there is, in my opinion, no more mystery in town planning than there is in planning a civic centre, a hospital, a school, a group of houses or a cottage. You cannot plan any of these properly unless you think of them in relationship to their surroundings.

The first thing we are given to do in our architectural schools is, perhaps, a summerhouse in a garden, and in order to make this small subject real we are made to consider it in relationship to the house, the trees, the paths, the view, etc. That is the first step in town planning. The next subject is a house. We are not only told the accommodation required in a house, but given its site in relationship to its surroundings, to the road, etc., etc. In planning a school we must know where the children live, how they arrive at the school, what games will be played, and what open space is available ; and so each subject that is dealt with brings in new considerations in site planning. All these are stepping-stones in town planning, and our minds become so trained that we could not attempt to plan any building just as a building which could be put anywhere, regardless of its surroundings ; so that when we come to the larger problem of grouping all these subjects together into one plan, we automatically apply the same principles.

We can study the history of planning, and existing plans of towns and villages of England and abroad, just as we can study the history of architecture and styles ; but we can never wholly apply them, because the equal conditions differ. Every subject has to be taken on its merits, and it is these merits we must analyse in dealing with the planning.

There are three types of development which we may meet. The first is building a new town or village from the commencement, on land where nothing important in the way of buildings exists ; another where life has already started and has probably been in existence for several generations, and where an increase in size is necessary, and the other where a village or a town has become deformed and requires major operations to straighten it out.

The first, building an entirely new town, is perhaps the most difficult to plan, because there is nothing existing, and we have therefore to conceive the ultimate town as we wish it to be, without having any past tradition to draw upon ; on the other hand, there being no restrictions, we are free to consider the town as we should like it to be. We must, therefore, know our conditions just as we must know them when we start on a new building. I want to compare this town planning wherever I can to buildings, because I think you will see how like to each other they are, and because I want to emphasise how the training in planning which we have all had is applied in all types of our work. The better and more competent our training is, the better will be the results of our planning.

There are only a few examples in this country, or in other countries, where recent entirely new towns have been conceived as a whole and carried out according to plan, but it is possible to imagine more in the future, and we should therefore put our minds to this problem, because we may be called upon to play our part in designing these towns or villages.

Drawing up the conditions is an extremely important consideration, just as it is in any building, and it is not a thing the architect does alone ; in fact no one can do it alone, and, even when there is a team of specialists, it is not easy to get agreement on all matters. The selection of the site is dependent upon many factors, and it is imperative that sufficient land should be available for all purposes, as the first issue to decide will be what size the town shall eventually become, and naturally this is bound up with very many conditions. Is it to be industrial, commercial or agricultural ? What industry or commerce is likely to be available, what numbers of persons are likely to be employed, is the personnel mostly male or female, is employment going to be sufficiently variable to absorb most classes of intellects ? Is a part of the town to be used as a dormitory or suburb to a larger adjacent town ? Things of this kind will determine, or at any rate help to determine, the general size of the town.

Having settled the size of the community, this will have to be worked to, if a proper plan is to be drawn up. It will then be possible to see whether the proper amount of land is available. I cannot go into the types of site which should be selected, because the conditions will naturally vary in different parts of the country, but many conditions will have to be considered, such as geological, geographical, contours, water-supply, drainage, electricity, availability of transport, etc., all of which make for the suitability for building up a community.

The site having been selected, we must study what physical features exist, railways, roads and rivers, as these might be the means of determining the entire layout of the town. For instance, a town which has one of these features running through the centre of it becomes automatically divided into two parts and is much more difficult to handle.

The position on the railway at which a station can be constructed may again be a very vital factor in the layout. The position of the railway might also settle the disposition of the industrial areas, if these are likely to require direct access for

receiving and delivering goods. Trunk roads, which are now more dangerous to cross than railways, cannot any longer be permitted to run through a town ; therefore the approaches and junctions to these roads must be carefully considered to ensure safe intersections, and we shall have to determine the number of direct approaches which can be allowed. Thus we shall find that these two important physical features, or barriers as I prefer to call them, will greatly influence the layout and may be the deciding factor in fixing the position of the civic centre and the rest of the community.

The location of the industrial area is of great importance. In the past it has been looked upon with a certain amount of horror, and has been allowed to develop in an unseemly fashion. Houses have been mixed up with works, back gardens have been built over for workshops, and, as they have developed, additions have been put on to them so that in time a whole area might readily become a badly designed industrial district. There is no need for an industrial area to be unpleasant, as we can see in places where these factors have been considered from the commencement. These centres must be conveniently situated to the workers, but it is not necessary or desirable that workers should be made to live amongst them, and, therefore, this area requires to be carefully related to the town.

Having considered the sites for our railway station, our main trunk road approaches, civic centre, industrial districts, and our living areas, we must then carefully consider the policy with regard to shops, schools, hospitals and other important matters. The shop and shopping centre is a subject about which there is always ground for discussion and disagreement. Generally speaking, there are far too many shops for the requirements of the people, and in consequence many of them have to struggle for an existence ; on the other hand, if we work out the number of shops necessary for the population, we shall no doubt find that the distance people will have to travel to reach these shops will be too great for convenience. Therefore, we may find that, over a certain area covered by buildings, one shopping centre is not sufficient, and we must therefore consider the necessity of providing suitable daily commodity shops within the living areas. On the other hand, people do like to congregate round a central area, and therefore in the central district the largest shops will naturally be placed. The same considerations, however, do not apply so much to offices, banks and business premises, so that these may be placed in the centre.

The question of entertainment is of importance in laying out the plan and must naturally be in proportion to the size of the population. For instance, before cinemas came into being theatres, concert and music halls constituted the major entertainments and these were generally central and people were satisfied to visit them very occasionally ; but this new form of entertainment has brought its new problem and one which has to be dealt with in an entirely different way, because people visit cinemas very frequently ; therefore, a considerable number may be required and they have to be within convenient distance of the houses. In England these cinemas are generally separate buildings with advertising façades, whereas in many European countries they are often placed at the rear of shops. In the same way, churches, schools, libraries, community centres, welfare and recreational centres and other activities of daily life have to be thought of from the beginning ; and we may find it necessary, depending on the size of the community, to form small centres apart from the main centre of the town.

The architect must become intimately familiar with the site. New towns will undoubtedly change the appearance of the landscape and it is desirable to keep intact as much as possible the beauty which exists ; contours, views, parkland, woodlands and special features must, therefore, be considered of extreme importance and must be carefully studied, as they will greatly influence the plan.

It is extremely important to be able to visualise what our layouts are really going to look like. It is so easy to point to great areas of land which have been built upon, designed in every conceivable form of geometric pattern, with no better result than to produce a maze of difficulties without even a sense of orderliness, but with only complicated and bewildering irritation.

Let us think of our small towns and villages as a beautiful garden, where we might plant tall clumps of daffodils growing amongst the grass, with masses of forget-me-nots giving a brilliant splash of colour ; or again, the massive herbaceous border, with the stately lupins and delphiniums lifting their tall heads against the more delicate smaller and more intimate flowers and shrubs ; let us arrange our town in a gracious manner, with beauty and in harmony. Do not let us ruthlessly destroy the beauties of nature. If the ground is undulating, let our buildings conform to the undulations. Think of those hillside towns in the Basses-Alpes which emulate the firs growing on a hillside on the higher slopes.

The time taken to build a town or a smaller community may spread over many years and not until there are sufficient people assembled together can we give them the permanent amenities which will be required, and consequently temporary buildings may have to be erected to accommodate those amenities. If these buildings are put up in the central area, this will become built up with unsuitable buildings and the tendency will be for it to become untidy, and inconvenience will be caused when these buildings have to be demolished to make way for more suitable accommodation ; consequently the centre may be the last part to be developed. It may be necessary, therefore, to create some of the smaller areas first and patience will be required by the residents to put up with the inconvenience which is bound to arise in the growth of a new town. It is, therefore, imperative that a complete sketch plan of the whole town be got out in order to see what can be started first and to map out the sequence of the things to follow.

There have been cases where development has taken place too quickly and dwellings have been erected long before any thought has been given to amenities. That is not only bad and illogical conception, but is unfair and detrimental to those destined to live in the area.

The second type of development which we are likely to meet is the village or small town which may have to be considerably increased in size. If we consider the village first, we shall probably find conditions similar to those which I personally found in a village with which I have recently had to deal, where the houses were grouped round the old manor house, 1558 ; with the inn, 1631 ; smithy, 1640 and farmhouse, 1679, nearby. There is a village green which has been partly encroached upon by a Victorian half-timbered school, with a few old houses dotted along the main street. The church is not old, but may have been on an old foundation. As time has gone on, certain developments have taken place. The railway came in 1866, and the station was placed some way from the centre of the village, and the usual railway cottages (1883) were built along the road leading to the village. A few shops were placed on the main road, a modern school has been erected and then, of course, the worst thing possible happened, and "better-class" houses were built in quarter-acre plots along an old lane leading to the Mill. These houses have no connection with the village ; they are all very superior, and one wonders why they ever came to be placed there. That is one type of village we may find. I had to add 50 houses somewhere in that district. Sites were offered me in all the most unsuitable places without regard to the village amenities, and had I accepted these I should have started a new colony. I had to reject these sites. Eventually I was able to build the houses, after much opposition, in the village itself. I have also considered the possible method of enlarging this village, retaining the old buildings, roads and tracks as far as possible, and have endeavoured to keep its individuality and have developed it as a unit to avoid it spreading in all directions.

This is an agricultural village and many of the people will be working on the farms which I have kept on the perimeter, but at no great distance from the workers. The village at present accommodates about 250 families. There are one or two large pre-war factories about a mile away and houses are springing up round these factories, forming isolated communities without proper facilities. This type of development has many disadvantages and leads to general dissatisfaction. It is this sporadic placing of factories and houses which must be prevented if we are to retain our communal life. I suggest, therefore, that villages will require enlargement to obviate the scattering which is constantly taking place. The demand for more agricultural housing is already being heard, and, unless planning takes place beforehand, these houses might easily be built in the wrong place.

There may be new villages to create or old ones to enlarge, and the first thing one must know is, what function will they perform. We know of new villages that have been built as a living area from a town, with no amenities, and used only as dormitories ; these are valueless as they depend entirely on the town for all services. A village, therefore, must have a function before we know what to put into it. If it is agricultural, then the position of the farms is of vital importance. If there are one or two local industries, we must know how these affect the people living in the village. With a few simple facts such as these we can then lay down the type of development which should take place. In an old village we shall be greatly influenced by what already exists. Many books written on town planning refer to foreign examples and I should like to say that as far as the village is concerned, there are few finer examples than those which have been created in England, and, although no one wishes to reproduce the architecture of the past, at the same time the charm of these old villages is well worthy of consideration.

Let us now consider the existing small town which may have to be increased, in the same way as we have considered the village. Some towns may have been planned, as many undoubtedly were in the past ; others may have grown, regardless of any planning. Some may be old fortified towns ; others may be open towns ; some laid out in regular lines ; others will be in irregular patterns. There will be found in all types some common features, where buildings are grouped round the manor house or church, or a coast town grouped round a harbour ; or the site may be formed at the junction of two main roads.

Towns, again, may have developed because of some special industry such as coal or iron, whilst others may have been built as curative places on account of some special spring or medicinal waters and in mild districts beneficial to health. A very careful survey must, therefore, be taken of existing conditions in order to discover the requirements of the people living in the town. We must ascertain where the population works ; analyse the railways, waterways, bridges, etc., discover how far the local industry is dependent upon waterway or rail traffic. We must discover any tendency towards the town's growth and the reason. What exists will naturally greatly affect any new plan.

If satisfactory planning has taken place, it will be simple to carry on with the tradition laid down ; but, where growth has been haphazard, it may be necessary to start afresh. To start afresh means there must be much out-of-date building, slums, congestion, etc., and a new town has to be made out of an old one. This means that where families are taken out of their houses, some other accommodation will have to be found for them during the period of rebuilding. Existing open spaces might, therefore, have to be taken over for building and used as a decanting ground, or temporary accommodation may have to be considered to enable us to make the first move. New schools will have to be erected before the old ones can be demolished and many new shopping centres may have to be formed to take the place of the conglomerate collection so often found on one single street. In the first case, in order to consider these in their proper relationship to each other, we must get out a plan as we wish to see it.

Many of our fine layouts—and there are a considerable number in this country—will help us to appreciate the results of certain forms of streets, squares, and vistas, and we shall have to keep continually before our minds the effect which will be produced when buildings are erected on our designed pattern; in fact, unless we design our pattern with the effect uppermost, we shall have fallen into the trap of those who plan streets purely as traffic routes and have not the vision or training to visualise the greater things. It is quite impossible to lay down any hard and fast rule on the form the plan should take. Although I have suggested that contours should be respected, there are examples of a grid plan being worked on to undulating sites irrespective of hills and dales. Others have carefully followed the contours, giving winding and irregular streets. Considerable variety is obtained by irregular streets; a curve has always a certain sense of mystery attached to it, and gives you the unexpected.

We shall most probably have to decide whether we are going to respect privately-owned property with defined boundaries, or disregard them if they interfere with the general scheme. Wren, in his proposal for the London Plan, disregarded property temporarily so that the sites might be rearranged and the building area re-divided, so that each person should get back his equal amount but with a more convenient arrangement. We all know what happened to Wren's plan. Some countries have compulsory powers, whilst others, like ourselves, have only the power of persuasion.

We may have to evolve a somewhat different type of development from that which has taken place in the past, in order to prevent fast main traffic passing through the town, and this may bring us to consider the possibility of a ring road for fast traffic instead of through traffic routes. This might have two advantages: one, as I have already said, to divert fast and dangerous traffic, and the other, to define the boundaries of our development area. If I might here digress, I should like to say how very much I feel that any town development is dependent on its relationship with other towns and villages, and that the physical barriers which exist, such as railways, roads, canals, rivers, hills, woodland, may become the boundaries of the proper planning area rather than areas which are now marked on the ordnance maps by dotted lines and have no relationship with planning.

Just as we may have to re-define ownership of land, so we may have to define suitable boundaries for planning in order to get some proper workable collaboration. If such a ring road were considered suitable, this would be following very much on the lines of the walled mediæval town in defining the limits of building and it would prevent the sprawl which so often takes place if the boundaries are not kept within suitable limits. The confines of an area might be marked by a green belt, kept free from buildings, except perhaps buildings of a special nature, such as hospitals, open-air theatres and sports centres. Open spaces within a town are a matter for careful thought, and there are very many opinions upon the subject. Open spaces in the past have been taken so readily for building purposes that we are at last considering them very jealously, and rightly so; but these spaces should be correctly positioned in relationship to their surroundings. There is doubt in some people's minds whether the country should be allowed to creep into the town, in the same way as there is a fear by others of the town spreading into the country; in other words, it is thought by some that you cannot bring rural scenery into urban entities. It is not for me to express opinions on this question; it is for the planner, in considering the effects he wishes to obtain, to decide how he wishes to treat open spaces; but I should like to suggest that such things as railways and trunk roads might conceivably be planned through green spaces rather than through built-up areas, and I further suggest, for consideration, that radiating roads, which might enter a town if placed in green strips, could be considered as a link with the country, bringing with them that fresh air which might otherwise be retarded if too many buildings get in the way.

I would say that a village or town, however small, should have a centre. There are some towns which do not appear to have any centre or focal point, and therefore are monotonous and apt to become uninteresting. The most important buildings are dotted about rather than given a dignified setting. In large towns or cities these centres can be dealt with by open squares about which civic buildings may be grouped.

In small towns there may not be a sufficient number of civic buildings to be dealt with in that way; nevertheless the market square, with its market hall or exchange, has in the past been developed to form a focal point, and these, in which England is rich, might well be studied. There are so many methods of planning these, such as a square at the junction of main roads, main roads entering the corner of a square, the square, rectangle or other form placed off the main roads, and many others which will present themselves when planning begins. However these are arranged, they should be spacious and pleasant centres for congregation; such incidents should not be too small, but should be large in outlook and simple. In any case I suggest that our planning should be direct, and no attempt should be made to emulate the accidental, which will no doubt become fussy.

This matter of thoughtfully planning in order that beauty may be achieved together with utility and suitability means that we must continually and consistently think from the plan to the effect. We cannot, for instance, lay down a law that a street must be of a certain width for various utility reasons without thinking of the effect which such a street will have if buildings of a certain type are put along its sides, and therefore we must always be thinking of utility, suitability and effect, as they are all inter-dependent, and this leads me to the question of site planning, or what I would prefer to call filling in the pattern which has already been made in our main plan.

Having arrived at the main broad pattern, the filling in between is simplified, as you know your limits of development. Incidentally, you might be the person to conceive the pattern, whereas you might not do the infilling; but you will have the satisfaction of knowing that it will form part of the whole, because you have designed it to play its part in the whole; on the other hand, you may be doing the infilling of some other person's conception of the whole, and here again you will know that what you are doing is not isolated but is part of a general conception. Site planning is the more detailed part of town planning, and the same considerations will apply. There will be vistas, open spaces, views, intimate pieces, small shops, possibly schools and maybe health centres, housing and perhaps flats, all depending, of course, on the size of the area and the number of persons to be accommodated.

Perhaps one of our first troubles will be to decide on the type of dwellings to be used. Generally speaking, for some psychological reason which is very difficult to understand, people prefer to live on a main road rather than in a close, square or cul-de-sac.

I shall not attempt to go into the arguments, as it is quite beyond the scope of this paper. They prefer to live in detached houses with their own compound, and a space between themselves and their neighbours. They will purchase a detached house, or even a semi-detached house, but will prefer not to buy one of a block of four or six, or a terrace house. The more a town dweller can feel he is living in the country, the better he will like it; he wants his own garden, not so much because he is fond of gardening, but because of the pride of possession. He is even jealous of his front patch, although he hates having to cultivate it and only does so because of the opinion of his neighbours. These are difficult problems with which we architects have to deal. Is it a reaction to the streets upon streets of houses which have been built in the past on narrow frontages that has so sickened those who have been condemned to live in them that they have revolted against them, or is it that they wish to emulate the single houses of the more wealthy people? The example set by people taking large plots and building all kinds and shapes of houses in all sorts

of positions along a street has not been a good one, and it may be that we have to evolve something in the way of site planning which will counteract the evils and present a more pleasant form of grouping and a more satisfactory form of living. It is not for me to attempt to solve this problem ; it would be presumptuous of me to try to do so, but I might be expected at least to offer some suggestions.

I think, as I said at the beginning of my paper, that sites laid out in circles, squares, octagons, crescents and half-circles, and every other conceivable shape of road layout with houses facing the roads and gardens huddled together in the centre, are unsatisfactory. It must be a tax on the minds of tradesmen and postmen to identify the particular houses, not to say anything of the wretched owner or occupier who has to find his own house in the dark, or even in the daylight for that matter. These houses are generally built in pairs, but so close together and on such mean and narrow frontages that they counteract any benefits which might otherwise be considered advantages of detached groups. The reason always given for the narrow frontages is economy in length of streets, but I venture to suggest it is bad planning which requires so many streets, and bad bye-laws which require streets upon which there is very little traffic to be made to such uneconomical widths and to such extravagant specifications.

I believe that terraces and blocks of houses can be built, each house with a wider frontage than usually given to the ones I have just mentioned, which might be generally acceptable. I would attempt to avoid the long narrow slip of back garden and would suggest a terrace amply large to sit out on and to grow a few flowers with a way out on to a properly-kept common garden or a space divided up into allotments, which if planned, can be made to look charming as any large vegetable garden of a private house or that of a nurseryman. Flats might be interspersed between houses instead of being grouped together. It does not appear to be necessary to separate houses into grades of respectability, with working class in one district, middle class in another and upper class in another ; the last very often forms the worst possible type of development.

I have avoided any allusion to density, because I do not think one can lay down any law regarding this ; it is all so dependent upon open spaces, widths of streets and the general amenity of the town. The reason maximum densities have been a matter for legislation is that we plan in little bits rather than as a whole, and therefore feel we must lay down some law to safeguard each small area.

### THE WAR DAMAGE ACT, 1941. SECTION 95

A member consulted the Institute recently with regard to his claim under the War Damage Act, 1941, in respect of the loss by enemy action of (*inter alia*) many drawings and specifications relating to work carried out by him for clients over a period of years. The Board of Trade declined to admit the claim in respect of drawings and specifications on the ground that being " documents owned for the purpose of a business " they are not insurable under the Act.

On the recommendation of the Officers of the Practice Committee it was decided to obtain the opinion of Counsel on the question and the case to Counsel which was prepared by the Institute's solicitor in collaboration with the Honorary Secretary of the Practice Committee is, together with Counsel's opinion, appended.

Members should refer to the notes published on pages 167-8 of the JOURNAL of August, 1941, on " Ownership of Architectural Drawings and other Contract Documents " and " War Damage Act, 1941, Section 95. "

With regard to paragraph 2 of the Opinion, it will be seen that in the opinion of Counsel, if drawings and specifications which an architect *retains* for the purpose of the architect's profession are not owned by the client for the purpose of the client's business then they are insurable under the War Damage Act,

Let us now think of the villages or small towns which have become deformed and require tidying up. We all know some of these, because we live amongst them. Let us think of some of our villages which have become neglected. Metal advertisements have been allowed to be placed on the buildings ; these could be removed and perhaps during the war many of them have been removed—let us hope so. Then there are the temporary shacks of small businesses, garages, etc., with untidy rubbish surrounding them ; these can be dealt with only by building them properly. There is the village green that has long since ceased to have any grass upon it and has just become a waste. This could be either sown or properly gravelled and kept tidy. Houses, owing to their age, are being allowed to decay and fall down and new ones built further out. These cannot be left and must either be repaired or, if beyond repair, pulled down and something built in their places. Then there are always one or two buildings badly designed and built in unsympathetic material, and my cure for many of these is whitewash. It is wonderful what you can do with whitewash and tar. All of these things can be done with a little expense, and it only requires someone with a little taste and a lot of tact, and many dull villages could begin to have respectability and charm.

The larger villages or small towns may require all these things done and more. In the past fifty years or so the development has generally been sporadic, and building has tended to take place outside the town in any open place without any regard for the whole. It will therefore be necessary to curtail the area of development and bring any new schemes within the proper confines of the towns. Where bad development exists, this will have to be scheduled for eventual destruction and the town planned so that all future building takes its proper place in the scheme of things. It is just as important that our small communities should have our attention as that the larger cities should do so, and I therefore feel that our thoughts should be directed to this end, and I would appeal to all architects to study their own immediate surroundings, finding out the faults and seeing how improvements could be made.

My lecture has been extremely general, but I hope it may have brought some things to your notice which will enable you to give thought to this most important problem of the replanning of villages and small towns. It is a problem in which we can all assist, and it is our duty as architects to see that bad development is not allowed through lack of interest or misdirection. Unless we do our duty now as architects and give a lead in this replanning in new developments and also in new housing, we shall not be entitled to complain if things are done badly in the future.

- (a) by the client under the Private Chattels Scheme, and
- (b) by the architect under the Business Scheme, although the drawings, etc., do not belong to him.

It is therefore considered advisable that every architect should for his own protection inform his clients what drawings and documents of the client he has in his possession and recommend the client to consider whether he wishes to insure such drawings and documents against war damage.

In the event of destruction of any such drawings and documents by enemy action members should of course inform their clients of the loss with as little delay as possible, in order that the clients may submit claims if desired.

#### CASE TO COUNSEL TO ADVISE

On the instructions of the Royal Institute of British Architects, the opinion of Counsel is sought on behalf of Mr. X, a member of the Institute, and the circumstances of Mr. X's claim appear sufficiently from the correspondence. The whole question is, however, of importance to the profession and it is therefore desirable that it should be reviewed on a broader basis.

Counsel will appreciate that the invariable practice of architects is to retain their drawings and specifications of buildings

which they have designed after the erection of the building has been completed, just as a solicitor normally retains his drafts of wills, conveyances, etc., and the possession of the drawings and specifications is of value to the architect since a reference to them may either (i) assist him in designing other buildings of a similar nature or (ii) enable him to design alterations or additions to the buildings themselves without being put to the trouble of making the detailed survey of the buildings which might be necessary if the alterations or additions were to be designed without reference to the drawings of the existing buildings.

It is, of course, clear, that while the copyright in the drawings is vested in the architect, the documents themselves belong to the client, and this distinction, it is thought, is not too well appreciated by architects, although the Institute has been at pains to point it out.

It will be seen that Mr. X lays stress on the value of the "negatives" and explains the meaning of this term in his letter of 1 May 1942. To whom do these negatives belong? Does the building owner own them even though he is in possession of a process copy of the "negatives"? Nor, it is thought, is it understood by the profession that the value to architects of the possession of drawings is (like the ownership of the copyright therein) largely a part of their goodwill.

Counsel may perhaps think it desirable to emphasise these aspects of the question in formulating his opinion.

The first question for consideration would seem to be :

1. Are either the drawings or specifications (whether original or copies) of buildings capable of being insured under the Act?

Since the documents in question are clearly owned by the owner of the building this question would appear to involve consideration of the question whether or not the documents are "owned for the purpose of a business." Manifestly they are not owned for the purpose of the architect's business, but if they are documents relating to premises on which a business is carried on, are they owned for the purpose of that business? Is the answer the same if the business is carried on not by the owner of the building but by a tenant?

Another aspect of this question which may be more difficult to answer arises where several buildings (perhaps private houses, perhaps business premises or perhaps some of each) are owned by a person or company who does not occupy but lets the buildings.

If the phrase "owned for the purpose of a business" is given its wide (and perhaps natural) meaning it would presumably include drawings of buildings the dealing wherein by the owner amounted to a business and in that event it would be irrelevant whether or not any business at all were carried on upon the buildings. If on the other hand the phrase is construed as "owned for the purpose of the business" carried on in the building in question the whole aspect of the matter is changed.

2. If drawings and specifications are capable of being insured, by whom can the insurance be effected?

(a) It is presumed that the owner can insure them, notwithstanding they are not in his physical possession; but is there any duty upon him to specify the address at which they are kept and is he disentitled to recover compensation if he fails to do so?

(b) Can the architect insure the documents or his interest in them? In this connection it may be relevant to consider whether the architect merely by retaining them, undertakes any responsibility to the owner, his client, to replace them if they are destroyed by war damage. (See 3 below).

(c) If the architect can insure, should he do so under the business scheme or under the private chattels scheme?

3. Is the architect under any duty, at Common Law or otherwise, to replace the documents if they suffer war damage, or to inform his client that the documents are uninsured or to take any other step in relation to the matter?

4. If the documents are capable of being insured, for what amount can insurance be effected or compensation claimed?

(a) If there are other copies in existence, presumably a claim lies for the simple cost of making a copy of the destroyed document.

(b) If no other copies exist, the replacement would involve in effect the creation of new documents, upon which considerable professional time might have to be spent and expenses incurred. For example, it might be necessary not only for the architect to prepare the documents anew but, particularly in the case of

drawings, to make a measured survey of the building in order to ascertain its dimensions and thereafter plot the survey and produce the drawings. The loss of the original drawings might cause difficulty in ascertaining the construction of the building in the event of alterations being required, which would lead to further expense in cutting the building about to expose construction covered up by the finishings, while in the case of reinforced concrete buildings (which are in common use to-day) the difficulties might be insuperable. In the case of large buildings, the expense of this would be considerable.

#### OPINION

In considering whether architectural "negatives, drawings and documents" (to use the comprehensive phrase appearing in the correspondence with the Board of Trade Assessor) are insurable under Part II of the War Damage Act, 1941, it is necessary to bear in mind that such negatives, drawings and documents, although commonly left in the possession of the architect after the work is completed, are nevertheless the property of the building owner. I would emphasise that, in my opinion, the ownership of the building owner extends to "negatives," using that expression in the technical sense explained in Mr. X's letter of 1 May 1942, even though he may also be in possession of process copies of such "negatives." While it may be, and often is of great practical assistance to an architect in the practice of his profession to have in his office particulars of the work which he has carried out in the past, the legal position is in my view quite clearly that the architect enjoys such facilities solely by the courtesy, or perhaps more frequently by the indifference of his clients, each of whom could demand his own documents at any time, leaving the architect nothing but such copies as he may have chanced to make for his own purposes while the documents were in his possession. On this basis, my opinion on the specific questions put in my instructions is as follows:—

1. Drawings and specifications are only insurable under Part II of the War Damage Act, 1941, if they are "goods" within the meaning of that Act. The expression "goods" is defined in Section 95 (1) of the Act so as to exclude "any documents owned for the purpose of a business." It is therefore necessary in each case to consider for what purpose the drawings and specifications are owned by the building owner. That purpose is not, in my opinion, governed by the purpose for which the building in question is used. Even if the building is used by the building owner for the purpose of a business, it does not follow that the drawings and specifications are owned for the purpose of that business; the building owner owns the drawings and specifications in his capacity as building owner, because he was the person who employed the architect to prepare the documents, and if he subsequently chooses to use the building for the purpose of a business, that does not, in my opinion, make him own the documents for the purpose of that business. If, on the other hand, the building owner is a person who causes buildings to be erected in such numbers that that is a business with him, I am of opinion that drawings and specifications are documents owned by him for the purpose of his business of an estate developer. Equally, in my view, a person who carries on business as a property owner owns any drawings and specifications which he may have acquired with any particular property for the purpose of that business, notwithstanding that he may not be the original building owner.

2. (a) I am of opinion that drawings and specifications which are not owned for the purpose of a business are insurable by the owner notwithstanding that they remain in the possession of the architect. Such insurance would be effected under the private chattels scheme, and it would not be necessary to specify the address at which the documents are kept.

(b) and (c) I am of opinion that drawings and specifications which are not owned for the purpose of a business are goods insurable under the business scheme by virtue of Section 60 (1) (a) of the War Damage Act, 1941, in relation to the architect who retains them in his possession for the purposes of his profession.

3. I am of opinion that the architect is under no liability to his client in respect of any war damage suffered by the client's documents in his possession, provided, of course, that the suffering

of the damage was not attributable to any failure by the architect to exercise reasonable care in his custody of the documents. It is a question of law whether documents are insurable in relation to the architect and the client must be deemed to be aware of the law on the subject, but since the legal position depends upon the purpose for which the documents are owned by the client, the architect ought to inform the client if it appears to him that the documents are owned for the purpose of the client's business, so that the client may have an opportunity of pursuing the subject if he is so advised.

4. (a) If there is another copy of a destroyed document in existence, the claim could not exceed the cost of making a copy of that other copy.

(b) If the destroyed document was unique, I do not consider that the architect could recover more than the loss suffered by him. That loss is no more than being deprived of the assistance which he could have derived from the destroyed document in designing other buildings, for, if it were necessary to re-make the document for the purpose of further work to the building in question, that is a matter for which the client would have to pay the architect. In my opinion the value of the destroyed document to the architect cannot be measured by the cost of preparing a new document from the old building, but only by the extra work which would be involved in preparing a similar document in respect of another building by reason of not having the destroyed document to work upon as a basis.

G. D. SQUIBB.  
7.1.45

## THE CAPACITIES OF THE BUILDING INDUSTRY IN RELATION TO RECONSTRUCTION

### INTERIM REPORT No. 6 OF THE R.I.B.A. RECONSTRUCTION COMMITTEE

#### Architecture and Building Industry Group

*Note.—This Report, issued by the Policy Group on behalf of the Reconstruction Committee, does not necessarily express the considered and final findings of the R.I.B.A.*

The Committee believes that the physical aspect of a national policy of reconstruction will have to be closely related to the capacities and resources of the building industries, both actual and potential.

The aim of such national policy will presumably be the fulfilment of the physical reconstruction needs of the country in the shortest predetermined time, but not in such a way as will involve in the future a volume of unemployment due to cessation of building activity or lead to the creation of redundant resources.

There are three principal causes of unemployment in any industry : first, the lack of demand ; second, unregulated entry into the industry ; third, unordered employment of resources in materials and men dependent upon or trained for the industry. These three conditions apply with particular force to the building industry, as entry into it is not controlled or regulated. The capacities of its resources, the men and material, are not available in the form of a known or recognised unit of output, and so it is, at present, impossible to ascertain and to tabulate at any given time what volume of work is necessary to give complete employment.

To remedy these deficiencies the Committee recommend that H.M. Government should take steps to set up : 1. A form of registration of the resources of the industry (not only to obtain numbers of practitioners and operatives, but also to avoid overlapping of resources as between the four groups of the industry) ; and 2. Following on, and as a consequence of a national plan, a form of registration of the building requirements of the country, both public and private, based possibly on localities or regions. With known resources related to a known demand, employment could be better regulated and progressive programmes of constructional work maintained over any set period of years.

The Committee also assume that any national policy of reconstruction will not overlook the long-term public works requirements of the Colonies, and possibly the short-term rebuilding requirements of a partly devastated Europe, as being likely to invite some participation by British industry related to building.

Whatever may be the effect of immediate European needs, those of home and Colonial reconstruction will require to be dealt with on the basis of planned and ordered progress related to specific time periods : here again capacities of the building industry on the one hand, and on the other the volume of work involved expressed in physical terms, will need to be at some early stage broadly but clearly defined. The following are proposals by the Committee for dealing with these two aspects of the building industry in reconstruction, namely : (a) Physical requirements, and (b) Physical capacities.

#### (a) Physical Requirements of Reconstruction

The Committee recommends that a survey be undertaken for the purpose of ascertaining and expressing in quantitative terms

the physical needs of (1) the reconstruction of partly demolished structures, (2) the rebuilding of wholly demolished structures, (3) the building of entirely new structures and (4) the construction of public works of all kinds. These physical needs should be related to the known and possible capacities of the building industry and a timed programme evolved.

#### (b) Physical Capacities of the Building Industry

The Committee assumes that the building industry is deemed to include the whole of (1) the constructional professional service, viz., architectural, engineering and surveying, and (2) building employers, (3) building trade operatives, and (4) building materials manufacturers and distributors. There must also be properly constituted facilities for technical, physical and sociological research. It recommends that steps be taken to determine what these four groups of agencies are capable of producing in their respective spheres on the basis of their present and potential numerical strength and resources. In the course of so doing the relative scope and function of these groups, more particularly perhaps in the case of the professional group, should be defined more clearly.

The full development of the capacity of the industry as a whole will depend to some considerable extent upon the financial principles governing remuneration, i.e., professional charges, the conditions of contract, rate of wages and price of materials. Decisions with respect to these could be arrived at during the process of determination.

#### Executive Machinery

Having defined the broad principle and scope of the problem involved in (a) and (b) above, the Committee has considered the form of machinery to ascertain, in the case of (a) the requirements, and in the case of (b) the resources.

The machinery necessary under (a) would need to be in the main based upon the professional group, as the work of surveying the constructional needs expressed in physical terms would call for the services of specially co-opted personnel from this particular group, with provision that when the survey was completed these personnel could be absorbed into their traditional services. The results of the survey would, however, be a known quantum of constructional work, and the Committee believes that such a survey is an indispensable preliminary to ordered progress in utilising the industry for reconstruction.

For (b) it would appear to be necessary to define *units of output*, and such machinery would therefore need to be representative of the four groups of the industry and the units evolved to be divided among, or applied to, the personnel of the respective groups. Once these units of production have been decided, the demands on the manufacturers and materials could be based accordingly, and thus a known quantum of construction output could, on broad lines at least, be established.

## THE CANDIDATE AND THE EXAMINER

### FINAL EXAMINATION: "DESIGN"

Many candidates appear to approach the Design Examination with an air of uncertainty or suspicion as though it were a form of "inquisition" in which the object of the Examiner is to "catch" the candidate or purposely to trip him. Others appear to think that they have to satisfy peculiarities of the Examiner.

This is quite wrong and it is hoped that these notes on the Design Examination may allay any fears or dispel misunderstandings which apparently exist.

*The candidate is to the Examiner rather in the position of an architect to his client.*

*He receives a letter of instructions (the programme) and is asked to prepare a sketch scheme to discuss with his client (at the oral). He should therefore be in a position to explain the reasons for his solution of the problem and to have logical reasons for any departure from the requirements or failure to meet the client's instructions.*

Candidates will sometimes say to the Examiner, "I was not sure what you wanted, what sort of building and what style."

*The Examiner wants only a logical solution of the problem set. He has no preconceived idea of a perfect solution and is not concerned with "style" or fashion, but with fitness.*

*The programmes are usually clear and are not the expression of the views of one Examiner only. A programme is drafted by one Examiner and discussed by the three Design Examiners. It is then submitted to a meeting of all the Examiners.*

*Should any portion be not clear it is revised. It is unlikely therefore that a programme should not be explicit, though some minor details may be left to the candidate's judgment.*

It is occasionally said by a candidate, "I did not notice such and such a thing in the programme." Now what is the position of the architect who says to his client, "I did not read your letter very carefully." The client may think, "Perhaps I have the wrong architect, or indeed, have I an architect at all?"

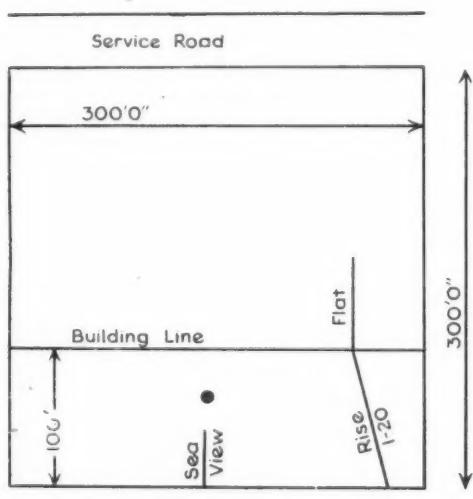


Fig. 1

There is frequently evidence that the candidate not only does not study the programme carefully, but makes no attempt to analyse it logically and in an orderly manner.

It is suggested that the following procedure might be adopted. The example is based upon the subject set in the 1942 July Final Examination, "A Seaside Hotel."

1. Draw the Site Plan to a small scale and mark thereon any special features. (See Fig. 1.)

2. Make a schedule of the accommodation and draw to a small scale the areas required for each unit.

(i) Entrance Hall, Reception Office, Management, etc.

(ii) Main stairs and lifts.

(iii) Lounge about 1,500 feet super.

L.

(iv) Restaurant and Dining Room about 1,500 feet super.

E.R.

(v) Ball Room, about 2,500 feet super.

B.R.

(vi) Writing Room.

W.

(vii) Smoke Room and Bar.

BAR

(viii) Kitchen and Stores.

K.

(ix) Garage about 2,000 feet super with lock-up space for 20 cars in addition.

G.

(x) Cloak Rooms and Lavatories for both sexes.

C.

(xi) Children's Room.

C.

(xii) Covered Verandah.

3. Prepare a series of possible solutions to a small scale, ignoring minor details and concentrating on the disposition of the principal units only. (See sketches Fig. 2, page 111.)

4. Prepare a sketch of a possible Bedroom Plan to ensure that it will work with the Ground Floor Plan.

Choose the solution you consider best to meet the requirements of the programme and prepare a sketch to a larger scale to pass to the Invigilator.

*Note.—A candidate can afford in the time allowed for the Design paper (27 hours) to spend the whole of the first day to reach the above stage.*

He should arrive at a solution in that time, and have the remainder of the time for drawing out his scheme and considering details. He is not required to show details of construction.

L. H. BUCKNELL [F].

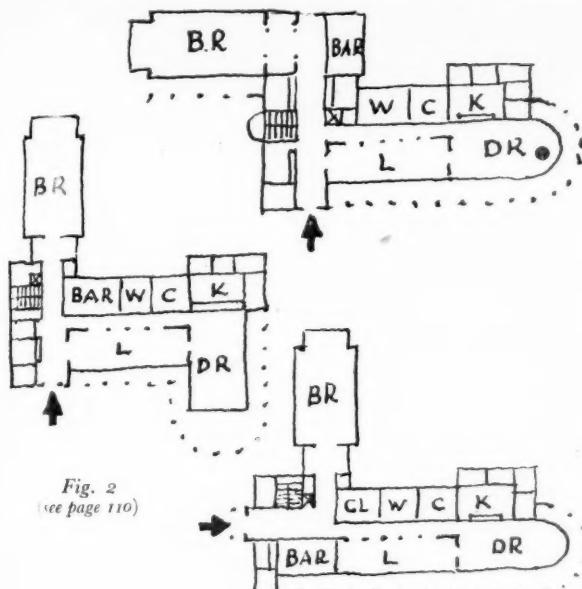
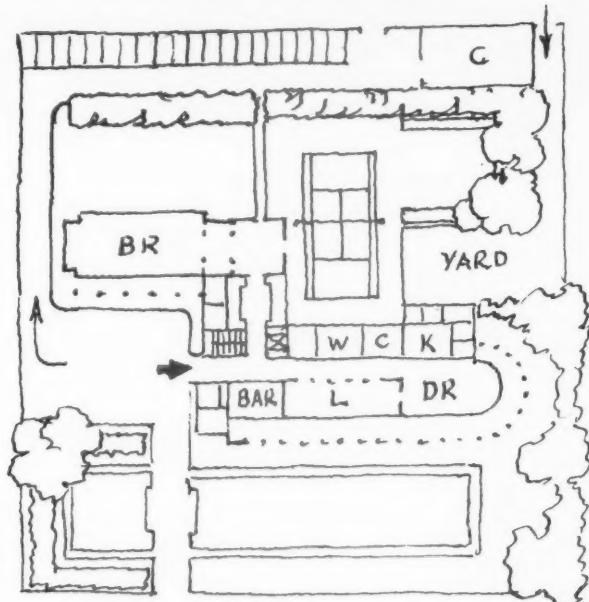


Fig. 2  
(see page 110)



## MINISTRY OF AGRICULTURE AND FISHERIES FARM BUILDINGS COMMITTEE

The R.I.B.A. were invited to submit evidence to the Committee appointed by the Minister of Agriculture and Fisheries to consider and make recommendations regarding the lay-out, design and construction of farm buildings after the war.

At the request of the War Executive Committee of the Council, Mr. William Keay [F.] and Mr. H. Duncan Hendry [F.] prepared a memorandum, which was forwarded to the Ministry and which is here published for the information of members.

### 1. General

Farm buildings are essential for the housing of domesticated animals, the storage and preparation of their food, the storage of farm products, and for the storage of machinery and implements necessary in the cultivation of the farm. The farmer, or some responsible person, should reside near the buildings to keep the stock under supervision day and night. As the buildings are a centre from which all farm activities radiate, they should thereby occupy a central position in relation to the farm as a whole. But other factors have a bearing on this point. A farmer and his family are social beings who wish to play their part in communal life; the education of their children necessitates proximity to a school and the young people benefit from some form of recreation. There is, therefore, much to be said for the grouping of homesteads as happens in most villages to-day, although it must also be admitted that improved means of transport, i.e., by bus and motor cycle, etc., have made things much easier for country dwellers.

### 2. Site

The site should be elevated to ensure efficient drainage and sheltered from the biting winds of the North and East, "which are neither good for man nor beast." The site should also be near a public road, handy for station or lorry transport. Farm roads are costly in upkeep.

### 3. Water Supply

We consider a piped supply of pure water under pressure as a primary essential in the working of a farm. It is indispensable in the requirements of buildings, house, cottages, baths, drinking bowls, troughs and dairy. A deep well or bore with an unfailing supply is a practicable alternative for a farm of any size, but even then there is always the possibility of the pumping plant breaking down and a long delay waiting for repairs.

### 4. Electricity

Electricity, preferably from public mains, should be available for lighting, heat and power. It is a convenient form of power for driving machinery in the food preparation room and for machine milking.

### 5. Drainage

We recommend that drainage from cowsheds and stables should discharge to a liquid manure tank. This means a separate system of drains to avoid excessive dilution by wash water. Some simple means is required for pumping the liquid manure into a cart for spreading on

the land. Facilities have to be simple and effective, otherwise the liquid manure is not used.

### 6. Buildings

The planning of buildings must vary with the size and type of farm, e.g., dairy, arable, mixed, pig, poultry. The buildings should be grouped to give the highest efficiency with the minimum of labour and the maximum comfort. Planning should, however, not be so "compact" as to make future additions impossible without considerable alteration to the existing buildings. In the arrangement regard should be had to the processes involved and, particularly, their sequence.

### 7. Stables for Cart Horses

Walls of concrete, brick or stone rendered to a height of 6 ft. Light at back of stable; ventilation at roof or over head of horse. If double stables, ample space between the rows of standings. Floors of concrete or brindle brick in cement. Brick or concrete mangers, concrete divisions. Drainage to discharge outside. Drinking trough outside stable. Harness room adjoining or near stable to have fireplace for drying harness.

### 8. Cow Sheds

We recommend single storey building. For a double shed provide two 3 ft. 6 in. feeding passages with runway; a low wall divides the feeding passage from the manger to keep cold air from cows. 3 ft. mangers divided to prevent robbing. 5 ft. standings. 2 ft. gutter. Central gangway 6 ft. with manure runway. Preferably concrete divisions with adjustable tie-up rings or tubular yokes as preferred. Inside surfaces of walls rendered 6 ft. high. End walls against which cows may lie to be cavity walls for warmth. Floors of concrete with a foundation of at least 6 in. broken brick or stone as insulator. Corners rounded or splayed. Automatic drinking bowls to each cow. Eliminate windows or reduce to a minimum. Combine lighting and ventilation by making top 2 ft. of roof on each side of ridge (4 ft. in all) of wired glass, hinged at the lower end for whole length of shed. Always a minimum space of 1 in. at ridge, increased up to 12 ins. at will. Fresh air inlets at low level near mangers. No mechanical milking in sheds. Wide sliding doors with sufficient lap preferable to hinged doors. Provide tap for washing floors.

### 9. Cattle Yards

These should be provided for wintering cattle, who convert barley

and wheat straw into a valuable manure. An illustration is given in *The Times* (29 January 1943) of an open yard near Eynsford, Kent, with walls of straw 15 ft. high carried on a wire and post frame. Covered yards give protection to cattle from severe weather and prevent the continual washing of manure and waste of straw. They may be incorporated with the buildings or otherwise should be surrounded by a wall sufficiently high to afford protection from winds, but at the same time should admit sunlight and air. A concrete causeway 5 to 6 ft. wide should separate the buildings or outer wall from the yard proper. The inner wall of brick or concrete about 4 ft. high may carry a tubular iron fence supported by concrete posts. Thus the cattle are always on view. The floor should be of concrete dished towards the centre, to enable liquid manure to discharge to the manure tank. Open jointed and grooved creosoted boarding has been successfully used for roofing, but owing to the scarcity of timber we recommend steel or concrete trusses and supports with corrugated asbestos sheets. Alternatively Cellactite, protected metal or Robertson's sheeting. An interesting curved roof of home grown timber with laminated timber truss is illustrated in the R.I.B.A. JOURNAL, December 1942. Drinking troughs and gates should be adjustable to the varying height of the straw manure. Portable mangers provide receptacles for food. Large covered manure pits are a necessary adjunct to covered yards. They may be of the concrete tank type with sloping floor to admit a cart. A runway between the yard and pit is desirable to convey the contents.

#### 10. Milking Parlours

To ensure cleanliness in the milking operation, milking "parlours" are recommended. The cows are groomed and washed in their sheds or between bails of 4, 6 or 8 in a separate room and then proceed to the bails in the milking parlours to be milked. The materials of which the "parlour" are constructed should be such as to facilitate them being kept scrupulously clean. The cooling room should adjoin the "parlour."

#### 11. Dairy

Floor should be of concrete treated to resist action of lactic acid. Reinforce floors with cast iron honeycombed blocks embedded in concrete to resist wear of churns. The dairy "unit" should include record room, cooling room, sterilising and washing room, boiler house and fuel store. All should have smooth walls and floors. Where bottling is done on the farm, a bottle store is desirable and bins for broken bottles.

#### 12. Bull Pen

An ample airy loose box with separate passage and access to exercise yard. Bulls like company (especially young calves); if in sight of them, they are less morose and savage.

#### 13. Calf Pens

Separate pens should be provided for calves with easy facilities for feeding individual calves.

#### 14. Loose Boxes

Sufficient airy loose boxes are required for sick animals, foaling mares and cows when calving, and for rearing calves if preferred to pens.

#### 15. Barns and Storage Sheds

It is suggested that some of the fine old barns in the Midlands should be provided with upper floors. Existing high doors should be reduced in height to conform with low vehicles now employed. The upper part would be filled in with glass for light. Dry buildings are required for storing artificial manures, etc., on ground floor. Cart or implement sheds can often be contrived at the ends or back of existing high barns by extending the roof slopes to give the required cover. This arrangement looks and is better than an ordinary lean-to shed with the roof at a different pitch.

#### 16. Implement Shed

The implement shed should face North. Ample room needed for implements required seasonally. Workshop and store for spare parts. Generally the lack of accommodation for implements has become accentuated since the increase in the area of arable land. Some of the Nissen and other types of huts may be available for this purpose on the conclusion of hostilities, but they should be used with discretion and kept in good order. Nothing looks more poverty-stricken than a dilapidated army hut.

#### 17. Dutch Barns

30 ft. wide, 15 ft. bays, 18 ft. to 20 ft. to eaves. Steel or concrete stanchions; curved or pitched roofs, covered with corrugated galvanised iron (if obtainable) painted with bitumastic paint, or corrugated asbestos cement sheeting. Both ends and one side to be sheeted with cellophane to within 10 ft. of floor. Runway to mixing room advisable.

#### 18. Mixing Room

Floor of smooth concrete. Separate room for machinery.

#### 19. Piggeries

On Dutch principle with manure passage at back and central feeding passage. Free from draughts, at the same time light and airy. Top ventilation, windows at sides. Farrowing pens to have bolt holes (with door) for access of young pigs to exercising yard. Pigs are cleanly animals if allowed the opportunity. Movable pens where climatic conditions permit, are commendable. In this respect the manuring of a field can be regulated by the relative position of feeding centres and sleeping quarters.

#### 20. Poultry Houses

Importance of water supply. Preservation of manure in a dry state. Bone digester and grit mill recommended for large poultry establishments.

#### 21. Silos

Small concrete silos of the Batley sectional type are convenient for quantities up to say 15 tons. Otherwise large permanent concrete silos with mechanical facilities for filling are recommended.

#### 22. Changing Room and Bath

For large and medium sized farms we recommend changing rooms for both sexes with clothes drying facilities, lavatory basin, W.C.'s and bath, to enable staff to change into their working clothes on arrival and to don their ordinary apparel on leaving, on somewhat similar but simpler lines to that obtaining in the mining industry.

#### 23. Materials

In the immediate post-war period there is likely to be a timber shortage, even of the home-grown variety. Therefore, timber should be eliminated as far as practicable from the design of buildings.

Walls may be of brick, stone or prefabricated concrete sections many types of which have been evolved in the construction of camps, etc. Roof may be precast concrete beams of the hollow type to avoid condensation, or prefabricated tapered beams with slab panels, made watertight with synthetic asphalt or ruberoid. Floors: precast beams with concrete finish for suspended floors; ground floor of insulated concrete. Stairs of concrete non-slip variety. Windows: glass blocks; steel casements for ventilating or non-ventilating type, and we recommend wired glass for windows. Spouting: eaves and downspouts asbestos cement. Protect lower length of downspout. Down pipes should not be placed near the external angles of buildings. Partitions: 2½ in. or 3-in. interlocking smooth hollow brick blocks for partitions up to 15 ft. high. No plastering required.

Generally speaking, the selection of materials must vary with the locality, but it will be futile to look to purely local methods of construction such as stone, chalk or cob walling, to solve the problem of providing cheap and efficient farm buildings. These methods require skilled labour of a specialised kind which, however much we regret it, is rapidly dying out. On the other hand, it would be equally unwise to rely too much on "prefabrication." Purpose-made sections may be useful in certain circumstances, but it is difficult to believe that they can be very economically used on a single set of farm buildings. This type of construction also has its drawbacks when repairs or alterations have to be made.

#### 24. Good Design

It would be a misfortune if the need for new and more up-to-date farm buildings after the war resulted in a crop of purely utilitarian structures, ugly in themselves and completely at variance with the beauty and unique character of the English countryside. This may well happen, however, in the scramble "to get something done quickly," no matter what it looks like. Good design should be the outcome of ordered grouping within the conditions set by the client and the right use of simple materials of good quality. The architect's training enables him to achieve this without straining after picturesque effects at the expense of good planning and sound construction.

#### 25. Bibliography

- 1905. 1. Modern Homesteads. S. Taylor, F.S.I.
- 1911. 2. Construction of Cow-Houses. M.A. & F. Leaflet No. 241.
- 1919. 3. Economic Farm Buildings. C. P. Lawrence.
- 1926. 4. Abstract of enactments. Milk and dairies.
- 1926. 5. Milk and Dairies, England. No. 821. S.R. & Orders.
- 1933. 6. Farm Buildings. E. Gunn.
- 1934. 7. Construction of Cow-Houses. M. A. & F. Bulletin No. 40.
- 1936. 8. L.C.C. Guide to Farmers. (Co. Med. Officer.)
- 1937. 9. R.I.B.A. Journal (Aug.). Dairy Farms. I. M. Williams.
- 1938. 10. R.I.B.A. Journal (Feb.). The Dairying Industry. I. M. Williams.

- 1942. 11. R.I.B.A. Journal (Dec.). Laminated Truss.

See also Bibliography, p. 338, R.I.B.A. Journal, Feb. 1938.

Signed on behalf of the Royal Institute of British Architects,

WILLIAM KEAY [F.R.I.B.A.], 6 Millstone Lane, Leicester.

H. DUNCAN HENDRY [F.R.I.B.A.], 90 Fenchurch Street, E.C.3.

## Correspondence

### ANY ANSWERS?

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—What is modesty?

Is it a virtue with which the Brains Trust has any acquaintance? Is it more modest for the Brains Trust to express opinions about architecture than for the ordinary man to express them about, say, biology?

Are their views on that, or on any subject in which they are not specialists, of more value than those of the man who *knows what he likes*?

John Burns said that "modesty was made for those that had no beauty." Is the Brains Trust very beautiful?

Yours very truly,  
L. SYLVESTER SULLIVAN [F.]

1 South Square,  
Gray's Inn, W.C.1

they had great responsibilities, and did fine work, but all under the direction of other people who had the final say.

Much later, when the new Ministry of Works and Buildings was created, firms of architects were employed as such, and their names added to the restricted list of firms already working on war hospitals and other jobs. But at this stage many offices no longer had their full complement of staff, and some were so denuded that they could not muster figures of staff impressive enough to convince the authorities that they could work effectively.

All this is so familiar that one apologises for taking up valuable space in recounting it. But it has seldom been related. And what has not been related at all is the fact that, while the organised profession has not had its proper chance, the elements of which it is composed have gradually been absorbed into Government departments and huge undertakings where they have done the work of architects without getting the credit for their very adequate performance.

Remove all the architects previously in private practice from the Ministry of Works and Planning, and see what would happen to that vast agency for building! Does anyone imagine for a moment that the clerical branch, or even the engineering branch, could manage without the architect? Take, for example, the programme of hostels all over the country, that of hospitals, of any other type of building, all of them now for Government purposes. It will be found that everywhere, doing the architectural work, is an architect, frequently one who was previously not an official architect. Of course, Civil Service architects have done fine work; but it is not to be forgotten that these are *architects*, too, part of the profession. How is it possible to say that the war-time building programme has been carried out practically without their assistance and that of the outside recruits who have temporarily joined them?

Added to architects working on buildings are men all over the country working as garrison engineers and in all sorts of major and minor Army and R.A.F. posts in all parts of this country and abroad. They are constructors, doing part of the war-time programme at home and in the field.

If one travels throughout this land at war, it is indeed extraordinary to discover how frequently, behind a job of work, is found the presence of a man who in civilian life was an architect. And, of course, still remaining civilians, there are considerable numbers of the profession working on maintenance, war damage and other somewhat drab but necessary tasks.

It is useless to prepare a catalogue, or to attempt statistics, which in any case in wartime are not available. What can be added is a word to counter the suggestion that may sometimes be made that where architectural firms have been employed as, for instance, in camps, hostels, hospitals, etc., the results have been disappointing.

Of course, there have been failures. Is there any calling or profession—medicine, law, literature, drama, music, engineering or what you will—where there are not failures? Lawyers lose cases, doctors' patients die, engineers' trusses collapse. But does anyone condemn these professions wholesale for that reason? Of course, architects are not always a success. They are professional men, a cross section of society, with the merits and failings of human beings.

But they should be given their due. There is so much talk of architects not being this or that, of having to justify their existence in the future, that it would seem necessary to state a case for the very high average of merit which the profession, just before the war, could legitimately claim to possess.

Far greater justice could be done to the very real claims for recognition of the architects' services in wartime than is within the capacity of the writer of this letter. It is to be hoped that members of the profession will come forward and refuse to be ashamed of their contribution. The architect has not been the failure. If the profession is shaken to its roots, it should be with determination never to permit this sort of neglect and misuse to occur again, particularly in the forthcoming task of reconstruction.

HOWARD ROBERTSON [F.]

## WESLEY DOUGILL, 1893-1943

By J. H. Forshaw [F.]

Wesley Dougill's death is a grievous loss to the cause of town planning in this country, and came as a painful shock to his many friends.

In the years before the war he had made his name as an architect and town-planner of outstanding ability and sound judgment, and his advice had been sought by numerous bodies and societies throughout the country.

He was equipped as few men to advise on certain aspects of planning and he had the ability to direct positive development as well as teach the art of civic and landscape design.

It was my privilege to know him and to enjoy his friendship for nearly twenty-five years, first as a fellow student and finally as a colleague working with him on a redevelopment plan for the County of London.

Wesley Dougill was a son of the Yorkshire Dales and he knew and loved the English landscape in all its seasonal characteristics and varying moods. It was a corollary that all matters concerning rural or coastal preservation should have made a strong appeal to him and it is well known that he applied his gifts and energy to many causes which sought to safeguard the beauty of the countryside.

Born at Asgarth, Wensleydale, in 1893, he had grown up close to nature and, indeed, there was an affinity in his stature and fine personal qualities, with the hill-tops and eternal sky. Huge, upright, and serene; patient as the shepherd through the storm; confident, with a smile growing brighter as the sun-spot on the green valley—this vignette of Wesley Dougill, depicts quite inadequately a personality enjoyed by those who knew him intimately.

Following a brilliant career at the Liverpool School of Architecture, where he graduated with first class honours in 1922, he proceeded two years later to the M.A. degree. Meanwhile, as the candidate placed second in the Prix de Rome of 1921, he spent a year at the British School. During this period he carried out much measured and research work and later secured the R.I.B.A. Silver Medal and £100 Measured Drawings Prize of 1923. After leaving Liverpool, Dougill held an appointment in Birmingham and I again enjoyed his companionship working in that city for over a year, I with the firm of Harrison & Cox and he with Harvey & Wicks. It was here that we were drawn even closer together, sharing "diggings" and making week-end excursions, inspecting new works and exploring the Malvern and Cotswold country. Dougill's boyhood had been spent in a "stone district" and this early association made him the best companion with whom to walk in Gloucestershire, understanding the landscape and familiar with the art of local stone-workers and rural craftsmen. When later he had opportunity to design in stone, his knowledge of the nature and possibilities of the material showed his skill to be authentic, and not merely that of the copyist. But these pleasant jaunts together in the west and midland counties ended, and we went our separate ways, Dougill very soon meeting the charming girl (Ileene Bridgwater), who was to become his wife and the mother of his two delightful children.

Dougill's academic distinctions—to which he was yet to add the R.I.B.A. Godwin and Wimperis Bursary, 1935—were of a high order, his executed work was invariably sane and robust, and his own peculiar gentleness and modesty was revealed by delicacy and refinement in detail. Nowhere was there a suggestion of a fashionable malaise; he was a modernist and yet a traditionalist, an idealist and withal a pronounced realist. These are the attributes of a progressive teacher and it was not surprising that in 1925 he was offered by Professor Reilly a senior lectureship in architecture at his old university and a research fellowship in civic design. Dougill accepted the dual post. He had always strong leanings towards the work of the town planner and he had

now the opportunity to apply himself wholeheartedly to the specialised calling in which he was soon to excel. Working with Professor Abercrombie in the Department of Civic Design he was later associated with him in the work of the Council for the Preservation of Rural England. From this time until the outbreak of war in 1939 Dougill's life was strenuous and full of a great variety of interests. He was for many years Editor of the *Town Planning Review* (Liverpool University Press), and he was engaged in practice as an architect and planning consultant. In 1936 he made a special investigation and report upon the Northumbrian Coast for the C.P.R.E. Coastal preservation and development was a subject in which he was intensely interested and at the Institute in 1937 he read a comprehensive paper on the "Recent Developments of the Seaside Resorts of North-West Europe and Italy," which demonstrated his unique knowledge. Dougill rendered valiant service to the Institute in recent years, as a member of the Council and of the War Executive Committee, and as Chairman of the R.I.B.A. Town Planning, Housing and Slum Clearance Committee before the war. His skill as a landscape planner was revealed in the successful design submitted in the important competition for the Redevelopment of the Old Lumps Fort, Portsmouth, where he secured, in partnership with E. A. Ferriby, the first prize for a comprehensive scheme estimated to cost £150,000.

For many years he had been a member of the Town Planning Institute, being particularly active with the Northern Branch; he sat on that Institute's educational committee and was especially useful as an adviser on the training of planners. He was a member of the Council of the Institute of Landscape Architects and was peculiarly fitted to render service to this young society. Wesley Dougill will be greatly missed by professional societies, colleagues and students; his generous help by advice and assistance was always forthcoming. He had staunch friends in all the areas of the allied societies of the R.I.B.A. and on Merseyside, and in the north of England especially, where he had held the honorary secretaryship of the Liverpool Architectural Society for several years.

Between the wars Dougill had travelled frequently in Europe and carried out research work in Holland and the Scandinavian countries, in Germany and in Italy. The outbreak of war came with no great surprise to him for he had seen the clouds gathering. In the war of 1914-1918 he had served with the 49th West Yorkshire Division as a sapper and then as a commissioned officer in France and Belgium, and later with the Army of the Rhine. Wesley Dougill was essentially a man of peace, but when the war came to England and London endured the "blitz" he sought a more active part in some form of national service, and so it was that Dougill came to London and to the Architect's Department of the County Council in December, 1940.

The devastation caused by bombing necessitated the setting up of a special service to deal with the clearance of debris and the survey of war damage, and the co-ordination of this urgent duty for the London Civil Defence Region was placed by the Regional Commissioners with the London County Council. Dougill was appointed to a post in this new service and worked throughout the period of air-raiding, being responsible for the survey of war damage, including records of damaged historical buildings and monuments outside the County of London. When in 1941 the London County Council was invited by Lord Reith to prepare a redevelopment plan for the County of London, Dougill was appointed assistant planning officer in the Architect's Department for this important work.

This work at County Hall, with Abercrombie and myself, was Dougill's last and notable contribution to town planning. How valuable and distinguished that contribution has been all of us who worked with him know full well. The knowledge that there

was so much to do—so much for which his gifts called—and an inherent feeling that peace might come quickly and reconstruction be rushed forward before all was ready, seemed to possess him. His anxiety to give all he believed he might contribute to the great work ahead while there yet was time was very real. He had the highest hopes for the future; he believed fervently that after this war the country would not permit the opportunity to pass and he held firmly to the conviction that real worth-while progress could and would be made. It was this belief that urged him to work with strenuous determination. But who, knowing Dougill, would say that he acted differently in this last work than formerly; had he not always thrown himself, heart and soul, into the task on hand? He was inspired by all he did, he was thorough in all things and in detail exacting; to no one was "the importance of the unimportant" more clear.

Such, briefly, was the contribution of Wesley Dougill to architecture and to civic and landscape design in particular. His attainments in a comparatively short life are outstanding among his contemporaries and his reputation stands upon this fine record of work accomplished while yet under fifty. Had he lived, who can tell what might have been achieved by this clear, purposeful mind, and what high place would have been assigned to his work?

The tragedy of Dougill's death at this time cannot be measured nor can we know what sublime purpose is hidden from us by this inexplicable call. He had endeared himself to all with whom he came in contact and we thank God for his life and shining example believing that his memory will be an abiding inspiration.

**Professor W. G. Holford [A.] writes:**

Wesley Dougill was a man of such wide and conscientious activity that people in many different places will wish to put on record their sense of loss at his sudden and unfortunate death. It is as a colleague in the Department of Civic Design at Liverpool—from which we were both seconded during the war—that I would like to add a tribute to his sterling qualities. I knew him first as a lecturer in the School of Architecture, where he came to be known affectionately as "Uncle Mac," and then as Research Fellow in the Department of Civic Design, where he took over from Professor Abercrombie the editing of the *Town Planning Review*.

As is the case with all teachers, the evidences of his teaching and the respect and affection which it occasioned, are to be found all over the country, and even outside it. Many of his students now in the armed forces, or serving in other than an architectural capacity at home, will come back to their jobs and feel again that sense of loss which struck all of us who heard of Dougill's passing on 15 February last. In a sense he was a "post-war" casualty, in that he gave his life very largely in the attempt to provide a better one for other people. The theory which for many years he had been teaching and writing about was being put into practice in the reconstruction plans of the L.C.C. We may suppose that although he overworked himself, he was happy in his task because he was thoroughly absorbed in it. The very day he went to Worthing, for the last time, to see his family, he visited the Public Library to make some investigation in his subject. The work he did was of the sort that so many take for granted; but when it is suddenly checked in this way, we appreciate it all the more.

Liverpool University, the School, the Department, colleagues and students, and also the Architectural Society, will all wish to pay a tribute to the work which Dougill did for them. Most of all I think the School, which he served as one of its most brilliant students, when he returned from Germany, after the last war, 24 years ago, and which he continued to serve, directly or indirectly, to the day of his death. In recording sympathy with his wife and children I think it is fair to say that he will not be forgotten by any of his contemporaries, nor by the school for many

years to come. Even then the *Town Planning Review*, and his publications on the preservation of the coastline, will preserve his written words wherever town and country planning is studied and discussed.

### PROFESSOR R. M. BUTLER [F.]

We are sorry to record the death of Professor R. M. Butler, R.I.A. [F.], which occurred at his residence in Dublin on 3 February 1943.

**Mr. Harry Allberry [A.] writes:**

Born in 1872 and educated in Dublin and abroad, Rudolf M. Butler was articled to the late Walter Doolin. He ultimately became a partner in the firm of Doolin, Butler and Donnelly, and so remained until he set up in practice on his own account. He designed many churches, schools, libraries, factories, hospitals and other buildings including University College, Dublin.

At the outset of his career, Butler realised how scanty were the opportunities available to young architects, in the closing years of the last century, to equip themselves adequately for their calling. As a result of a brief correspondence on the subject that appeared in 1896, in the *Irish Times*, a meeting between him and the writer was arranged; and, with Mr. McGloughlin and Mr. Gleave, then assistants respectively in the offices of Mr. George C. Ashlin and Mr. William Hague, it was decided to revive the long-moribund Architectural Association of Ireland, of which the first session opened in the autumn of that year. The Association steadily expanded in numbers and influence until to-day it ranks second only to the London Association. Butler was honorary secretary to the A.A.I. in 1898-99; vice-president in 1902-03, and president in 1907-08. Joining the Royal Institute of the Architects of Ireland in 1896 he, with a determined band of colleagues, sought to invigorate a then supine body and to transfer more power in the direction of its affairs from the Council to the members. This object, in the face of strong opposition, was eventually attained.

His interest in student training and in the development of professional policies and politics continued throughout his life. For very many years he served on the Institute Council, on various standing and special committees, and on the Board of Architectural Education, ever stressing the need for enhancing professional efficiency, which he laboured unsparingly to promote. He became a Fellow of the Royal Institute of British Architects in 1906, representing the Irish Institute upon its Council and Board of Architectural Education. It was, therefore, most appropriate, when the Chair of Architecture in University College became vacant after the death of Professor William Scott, that he should be appointed in 1924 to this responsible position, which he occupied with such distinction until his retirement a few months ago through ill-health. During his term of office, the School of Architecture prospered to a remarkable extent. The status gained by the school was externally recognised when its B.Arch. degree was accepted in 1930 by the R.I.B.A. as exempting candidates for Associateship from the Institute's Intermediate examination and, in 1937, from the Final examination.

Butler sought many sources of occupation beyond the limits of his own profession. He was a Royal Hibernian Academician, a Fellow of the Royal Society of Antiquaries, Ireland, and a member of the Royal Irish Academy. A fluent writer, he contributed thoughtful and discriminating articles upon architectural and antiquarian subjects to various Irish and British professional and technical journals. His editorship of the *Irish Builder and Engineer*, which covered a period of some forty years, was marked by a series of editorials and a fortnightly column of "Current Topics" that revealed a deep-seated knowledge of architectural history and literature, particularly of the Georgian era, of which he made special study.

Avoiding personal publicity of any kind, the extent of Butler's influence in professional matters was not as widely appreciated as it deserved. An obvious disinclination to suffer fools gladly, combined with a certain austerity of speech and manner, sometimes created, at first meetings, a false impression of his true nature. To his intimates he revealed himself as an agreeable conversationalist, a man of generous hospitality, a sound adviser, and a firm friend. Their deep sympathy with his bereaved family, a widow, son and three daughters, is deep and sincere, for they recognise the loss of one who, without ostentation, exercised no little influence on the development of the arts of his country and the severance of one of the few remaining links between the culture of the architectural profession as practised in late Victorian times and the commercialism with which, perchance, it nowadays bids fair to become imbued.

## Book Notes

**Sir Edwin Lutyens, An Appreciation in Perspective**, by his Son. Country Life Ltd. 1942. 8s. 6d.

It depends so much on how we think of Lutyens. To some people he is one of our five or six successful architects who has been considerably helped by family and social connections; to others he is almost an anachronism, designing buildings in the style of three or four hundred years ago and wholly out of touch with the modern trend of thought; and to some of us he is among the dozen or so great European architects of the past five centuries—a star, sometimes twinkling perhaps, to be ranked one day in our national history with Turner and Milton. Personally I adhere to the third opinion and must confess to a long and unflinching devotion to the subject of this small book by Robert Lutyens, R.A.F. In fact, the author's attitude to his father exactly expresses mine. It is, as well, quite shortly but learnedly and most gracefully put down.

For beyond all of us Sir Edwin is so flamboyantly an architect. That has always been my impression. It is pretty certain that he cares for nothing else. He is in that, as his son puts it, of immense distinction, and "he possesses this rarer of all qualities in excess of any mere superabundance of virtuosity. It is far more than the sum of his great merits; of his devotion to form, his unsparing labour, his personal modesty, his wit, his endearing and provoking peculiarities of habit and his uncompromising honesty."<sup>25</sup> Again, as regards Sir Edwin's place in contemporary architecture, Mr. Lutyens maintains that his father is really the last of the humanists, that his buildings are sufficiently suited to the society in which he has always believed and with which he is familiar. He is not excited by our radical experiments in flying steel and glass. Why should he be? People still like houses to look like houses and not char-à-bancs. His buildings possess the traditional characteristics demanded by established custom, but re-vitalized and re-interpreted and, in their maturity, they epitomize our great store of architectural experience and summarise, as it were, what has gone before. But that is not quite all. You might even say it of Norman Shaw. The art of Lutyens goes further. For it adds to the fruit of profound knowledge and tremendous skill the startling beauty of sheer abstract proportion touched with an enchanting ingenuity. A quite intoxicating charm, that is, which makes me at least travel quite long distances in the wrong direction merely to look at one of these works. Then, it seems, all the fuss about them not pertaining to the modern outlook matters not at all—especially as many of them actually do. The Liverpool design is entirely contemporary. It is a modern cathedral in *excelsis*, for the housing of an ancient faith and ritual, and demanding that look of thumping grandeur rooted for ever which only those forms of that kind of structure can give. It is quite unrelated in its appearance to the ephemeral glittering clean efficiency of an emporium for the sale of cooking utensils, for instance. When people say there must be an all-embracing modern style they forget the vast scope of modern architecture. To get it you must reduce that scope and prevent people wanting things like the houses in the country and enduring places of worship which they have enjoyed already for hundreds of years. It is not dull die-hardism we want nor a clean sweep but the ability to appreciate, for instance, the new Chelsea suspension bridge as much as that masterpiece, the Cenotaph.

As to the book itself. It is no more than a very able sketch—a kind of aperitif to a much richer feast to be provided later, I hope sincerely, by Mr. Lutyens. There is a chapter on the Family; then the early vernacular period of Marsh Court and other houses. Delhi is touched on with a long quotation from Robert Byron's splendid praise of the Viceroy's House. Thoughts on the Cenotaph and Liverpool are followed by a chapter of solid geometry in which we are told, among other things, how Sir Edwin draws a Cyma using square roots and things. When this is enlarged in a more massive work I hope it will be done very simply, at greater length and as clearly as Euclid's first book. Otherwise it will defeat the average intelligence of the profession. I found it most difficult and rather tiresome. But the chapter on "the professional man" is delightfully illuminating, especially when the son analyses the father's "fooling" as a means of assault on the stubborn resistance of the unimaginative, a kind of shield against dejection and that frustration (we all know so well) by maddening clients. Finally, a postscript embroiders prettily the author's views on architecture and his illustrious parent's position in it. The writing reminds me of Geoffrey Scott's, though less crystalline. One might say, perhaps, that the book is a little too literary for the subject. Nevertheless, all of us who read anything should read it.

A. S. G. BUTLER [F.]

**The Process of Architectural Tradition**, by W. A. Eden. London: Macmillan. 6s.

Mr. Eden has a magnificent theme—the value of the classic tradition in architecture. In some ways the author is well equipped for his task. He brings to it an almost fanatical love of his subject, he is singularly honest and is not afraid to venture into those realms of the spirit which finally determine all our values. Nevertheless the result is disappointing. I picked up this little book with a feeling of great expectancy and put it down with something akin to dismay.

The work should have been in some sense a corrective to our neopuritans, whose somewhat restricted conceptions might have received colour and amplification from a more adequate rendering of this essay on tradition. Mr. Eden's method is to take the whole story of classic architecture as a continuously developing theme from fifth century Greece down to our own Regency. From this central theme there are two main divergences, one the Gothic which is dismissed as *not* being architecture, the other being Baroque, which is disposed of by a slighting reference. From these ingredients Mr. Eden proceeds to make a distillation which he calls "Architecture" and which he offers to all and sundry as the only true absolute.

The book is a strange mixture of muddled philosophy, dogmatic statements which cannot be substantiated and fallacious arguments. Lest this should be thought too severe, I recommend the reader to consider the dangerous bifurcation which Mr. Eden adumbrates on p. 74:—"This brings us to the consideration of what constitutes the essential work of a School of Architecture—work that can be done there and, in the present circumstances, nowhere else. It is not the giving of instruction in matters of architectural practice, *nor is it the teaching of building construction*" (the italics are mine). Mr. Eden does not define what he means by "building construction" except by saying that it can be learned best by going to a builder.

Now to my mind architecture is nothing more and nothing less than the aesthetic realisation of structure, or in simpler language it is the art of building, using the word "building" in its widest sense to embrace all our modern techniques. Therefore, to say that "building construction" should not be taught at Schools of Architecture appears to me to be nothing but mischievous nonsense. Finally, Mr. Eden concludes his argument by an advocacy of "imitation." So as to leave us under no misapprehension he makes it quite clear that Classic Architecture has once and for all and for all times provided us with the whole language, grammar and dictionary of architecture and it only remains to us to rearrange the pieces in order to solve our own particular jig-saw!

It was the puritan excesses of the seventeenth century that created the excesses of the Restoration; but these excesses corrected each other, the resultant being the Augustan age of the eighteenth century. As I recently heard Professor Crowther wittily remark at a meeting of those interested in education:—"It would appear to be the aim of modern education to make all our humanists scientists and all our scientists humanists." In the same way it might be said that the aim of architectural education to-day should be to make all our modernists traditionalists and all our traditionalists modernists!

STANLEY C. RAMSEY [F.]

**Drainage and Sanitation**, by E. H. Blake, 6th Edn. revised by W. R. Jenkins. 8vo. xii + 558 pp. London: Batsford. 1942. 15s.

At a time when standard text-books go out of print more rapidly than new books or revised editions of good old ones are published, a new edition of as valuable a book as this is most welcome.

Blake's *Drainage and Sanitation* is described as an introduction to the subject, but it is none-the-less a handy reference work for the architect in practice. The details of normal drainage and sanitation practice are covered adequately, though students and examiners now are likely to ask for more information than is given on a few of the more advanced systems of, for instance, refuse disposal from flats—the Garchey system is not mentioned—or on the details of the installation of one-pipe plumbing. Also an over-generous amount of space is given to the illustration and description of various sanitary contrivances which are no longer manufactured in Britain and are only referred to as things to be condemned when seen.

The main headings are: The building, its environment; its planning, construction, prevention of dampness, etc.; its ventilation (without reference to orientation and site planning, which are increasingly recognised as factors of first-class importance); its warming and lighting; its water supply, sanitary fittings and waste pipes; drainage, sewage disposal, materials used in sanitary work, sanitary surveys and reports, and refuse disposal.

## Review of Periodicals

1942-43—II, *continued*

### ARCHITECTURAL VOCATION; PROFESSIONAL PRACTICE, *continued*

JOURNAL R.I.B.A., 1942 Nov., pp. 7-11: Architecture and engineering: lecture by W. H. Ansell [P.] in series organised by the Institution of Civil Engineers, and given at Cambridge. *BUILDING*, 1942 Dec., pp. 268-9: "Architect and planner": article on opportunity of the architect in post-war reconstruction, by Nicholas Stephen. *JOURNAL R.I.B.A.*, 1942 Dec., pp. 27-9: "Architecture and civic planning": paper to T. and C.P.A. by W. H. Ansell [P.]. The place of the architect in planning. *ARCHITECT AND BUILDING NEWS*, 1942 Dec. 11, pp. 168-9; *ARCHITECTS' JOURNAL*, Dec. 10, pp. 382-4; *ARCHITECTURAL ASSOCIATION*, Dec.; *BUILDER*, Dec. 4, pp. 477-8: "Towards a consolidated building profession": talk by Eric L. Bird [A.] at A.A. *PENCIL POINTS*, 1942 Oct., pp. 55-7: "Little plans won't do!" Short article by Talbot F. Hamlin on the post-war outlook. *ARCHITECTS' JOURNAL*, 1942 Dec. 3, pp. 361-2, and subsequent issues: "After the War" series of articles: No. 1, by A. Calvley Cotton [A.]. (Dec. 17) 5, by H. Myles Wright. (Dec. 24) 6th article, by C. C. Handiside. (Dec. 31) 7, by D. E. E. Gibson [F.], of Coventry. "What I would like to see" and comments on Article 2. *BUILDER*, 1942 Oct. 30, p. 377: Schedule of charges for building work, published by Manchester Building Trades Association: reprint of explanatory leaflet since issued, following letter by "Northern Builder." (Schedule itself reviewed Oct. 2.) *BUILDER*, 1942 Oct. 30, pp. 377-9, and subsequent issue: "Cost-plus": further correspondence. *ARCHITECT AND BUILDING NEWS*, 1942 Dec. 11, pp. 166-7; *BUILDER*, Dec. 4, pp. 485-6: The future of the quantity surveyors' profession: report by the Quantity Surveyors' Committee of the Chartered Surveyors' Institution. Including tendering methods and "cost-plus" contracts. *BUILDER*, 1942 Dec. 18, pp. 530-1: Forms of contract: discussion at a further I.C.E. conference, by E. J. Rimmer, Sydney Tatchell [F.] and others. **BUILDING (Generally)** *ARCHITECT AND BUILDING NEWS*, 1942 Nov. 27, pp. 132-3; *BUILDER*, 1942 Nov. 27, pp. 465-6: Address by A. C. Bosson [F.] to London Master Builders' Assocn. (Br.): "A new technique for building?" (A. & B.N.): "Regulating building." *COUNTRY LIFE*, 1942 Oct. 23, pp. 792-3: A builder's experience, by Sir George Burt—second article in series "What is wrong with building?"—ending with "The public's remedy," allocating blame. *COUNTRY LIFE*, 1942 Dec. 11, pp. 112-9: "What is wrong with building?" series: viii. Summing-up, by Hugh Beaver. *BUILDER*, 1942 Nov. 6, pp. 400-1: "A development association in war time": article on the work of the Cement and Concrete Association, especially on housing, shelter-house and hut design, by Eric Neel [A.]. *COUNTRY LIFE*, 1942 Oct. 30, pp. 840-1: "Marriage of science and craftsmanship," by Dr. R. E. Stradling; "What is wrong with building?" series, iii. *ARCHITECTS' JOURNAL*, 1942 Nov. 5, pp. 299-303; and other notices: Scientific and technical development in building: lectures at R.I.B.A. Saturday meetings, Oct. 10 and 17. (A.J.): lectures at first meeting, by A. W. Skempton on foundations, and Haussler on soil mechanics; brief reference to Councillor Greave's paper. (Br.): lectures by Ewart S. Andrews and C. S. White [F.] at second meeting; full report, including discussion. *ARCHITECT AND BUILDING NEWS*, 1942 Dec. 4 and subsequent issues: The Byelaws and building construction: new illustrated series by George Fairweather [A.], monthly. i: Building sites. **STRUCTURAL ELEMENTS** *JOURNAL, INSTITUTION OF CIVIL ENGINEERS*, 1942 Dec., pp. 100-127: Settlement of London due to under-drainage of the London clay:

paper by Guthlac Wilson and Henry Grace, with graphs, maps showing standing water levels at various dates, and geological sections.

*CIVIL ENGINEERING*, 1942 Dec., pp. 255-8:

Preliminary surveys for foundations: article by R. R. Minikin, with specimen report and illustrations of timbering, and probing and boring equipment.

*JOURNAL R.I.B.A.*, 1942 Nov., pp. 3-6; 12:

Some principles of foundation behaviour: A.S.B. lecture at R.I.B.A. by A. W. Skempton. Also account of the series of lectures.

*ARCHITECT AND BUILDING NEWS*, 1943 Jan. 8:

Foundations: second in Geo. Fairweather [F.]'s "By-laws and building construction," folding plates.

*CONCRETE*, 1942 Nov., pp. 403-4:

Rapid construction of foundations in frozen ground: with illustrations of protective tents.

*CONCRETE*, 1942 Nov., pp. 400-2:

Precast joists with wire reinforcement: "an American method for saving steel," for housing at Los Angeles. Short illustrated article.

*ILLUSTRATED CARPENTER AND BUILDER*, 1942 Nov. 13, pp. 544-6: Roof construction, by Edgar Lucas, continued: Lengths and bevels for pitched roofs. Diagrams.

*JOURNAL R.I.B.A.*, 1942 Dec., p. 32:

A laminated truss in green timber: illustrated note by Peter Berner [A.].

*ILLUSTRATED CARPENTER AND BUILDER*, 1943 Jan. 1, pp. 12, 14, and subsequent issue:

Prefabricated timber roofs: in Edgar Lucas's series.

### SPECIAL KINDS OF BUILDING; BUILDING ORGANISATION; FORMWORK

*SOUTH AFRICAN ARCHITECTURAL RECORD* (Johannesburg), 1942 Aug., pp. 230-6:

"Colonial homes" in tropical and sub-tropical countries: article by V. de A. Garrett, from a publication of the Ministerio da Economica of Portugal, with outline plans and constructional details.

*BUILDER*, 1942 Nov. 6, p. 398:

*JOURNAL R.I.B.A.*, Oct., p. 214:

Progress graph (section of building divided lengthwise chronologically), devised by Dr. C. H. Holden [F.].

*BUILDER*, 1942 Nov. 6, pp. 396-7:

Time and progress schedule: M.O.W.P. scheme. Article, and reproduction of a typical schedule.

*CONCRETE*, 1942 Dec., pp. 433-46:

Construction with moving formwork: long illustrated article by L. E. Hunter. With special reference to cellular silos.

### BUILDING PRACTICE AND INDUSTRY

*ARCHITECTURAL DESIGN AND CONSTRUCTION*, 1942 Dec., pp. 239-40: The Building industry in 1942: article by George Greaves [A.], of Stoke-on-Trent.

*ARCHITECTURAL FORUM*, 1942 Oct., pp. 70-81:

Building's post-war pattern: No. 3, An integrated industry. Long article, with charts and a symposium of comments.

*COUNTRY LIFE*, 1942 Nov. 13, pp. 941-3:

"An engineer looks ahead": article on reorganisation of the building industry by Dr. Oscar Faber, fifth in the series "What is wrong with building?" Advocating team-work rather than State control.

### MATERIALS

*SOUTH AFRICAN ARCHITECTURAL RECORD* (Johannesburg), 1942 Aug., pp. 228-9:

Fire-proofing thatch—a method: by Dr. Bernard H. Knight.

*ARCHITECTS' JOURNAL*, 1942 Oct. 29, pp. 275-6, 278 ff.:

"The future of plastics": article by G. Fejér, diagrams showing building applications, and views of typical products—pliable and rigid sheets, tiles, laths and extrusions, finished components, small fittings, and translucent units; with notes on the future, by "Pessimist" and "Optimist."

*PLASTICS*, 1942 Nov., pp. 396-407, and subsequent issue:

Plastics in assembled building structures: another series by G. Fejér. i: The "minimum" kitchen. With views, A.P.R.R. and other diagrams, and references. (Dec.): Bathroom units.

*ENGINEERING NEWS-RECORD* (N.Y.), 1942 Oct. 29, pp. 45:

Rammed earth used for F.P.H.A. housing, U.S.: progress views and views of house.

### CONSTRUCTION, INCLUDING PREFABRICATION

*JOURNAL R.I.B.A.*, 1942 Dec., pp. 34-8:

Prefabrication: manufacturers of houses and systems of p. in U.S. Reprint of pamphlet by U.S. Central Housing Committee on Research, Design and Construction.

(To be continued)

## NOTES

### CONTROL OF BUILDING AND AMENITIES UNDER THE WAR DAMAGE ACT

Since the note published in the November JOURNAL on the areas scheduled under the War Damage Act, Section 7 (2), the following additional areas have now been included under the provisions of this section of the Act.

The dates following the areas are those in which the orders become effective.

#### Areas in which no works costing more than £100 are allowed without prior submission to the War Damage Commission :

URBAN DISTRICT OF CROMER.—An area bounded on the north by the sea, and on the east, south and west by the centre line of the following streets :—On the east, The Gangway ; on the south, Loudon Lane and Mount Street ; and on the west, Prince of Wales Road. (6.11.42.)

COUNTY BOROUGH OF MANCHESTER.—An area comprising the following wards :—Exchange, St. Ann's, Collegiate Church, St. John's, Oxford, All Saints, St. George's, Medlock Street, St. Luke's, Miles Platting, St. Michael's, and Moss Side East. (6.11.42.)

COUNTY BOROUGH OF BOOTLE.—An area comprising the whole of the county borough with the exception of Orrell Ward. (6.11.42.) (To be read in conjunction with the order of 19.8.41. The conjoint effect of these two orders is that within the area now specified all works costing more than £100, or ten times the net annual value, whichever is the less, should be submitted to the Commission. In the Orrell Ward all works costing more than £1,000, or ten times the net annual value, whichever is the less, should likewise be submitted to the Commission.)

COUNTY BOROUGH OF YORK.—An area comprising Guildhall Ward. (20.11.42.)

COUNTY BOROUGH OF EXETER.—An area comprising the following wards :—St. Petrock, St. John, St. Paul, St. Sidwell, that part of St. Matthew Ward north of Clifton Road, including the frontages on both sides of Clifton Road, and those parts of St. James, St. David and Rougemont Wards south of the Southern Railway main line. (1.1.43.) (To be read in conjunction with the order of 22.5.42. The conjoint effect of these two orders is that within the wards now specified, all works costing more than £100 or ten times the net annual value, whichever is the less, should be submitted to the Commission. In the remainder of the area of the County Borough of Exeter, all works costing more than £1,000, or ten times the net annual value, whichever is the less, should likewise be submitted to the Commission.)

URBAN DISTRICT OF BARNET.—An area bounded by the centre line of the following streets :—On the north-east, St. Albans Road (that part between Alston Road and High Street) ; on the east, High Street Church Passage (that part between St. Albans Road and Church Passage) ; on the south, Wood Street (that part between Church Passage and The Avenue) ; on the west, The Avenue ; and on the north-west, Alston Road. (15.1.43.)

BOROUGH OF BRIDLINGTON.—An area comprising the following ward and parts of wards :—Quay South Ward ; Quay North Ward—that part to the east of the London & North-Eastern Railway (Hull and Scarborough line) and to the south-west of the centre line of Limekiln Lane ; Hilderthorpe North Ward—that part to the east of the centre line of St. John's Avenue. (22.1.43.)

COUNTY BOROUGH OF BATH.—An area comprising the following wards :—Kingsmead, St. James, Widcombe, Westmoreland, Oldfield, Twerton East, and that part of Lansdown ward to the east of the centre line of the following streets :—Marlborough Buildings, Cavendish Road, and Winifred Lane. (26.2.43.) (To be read in conjunction with the order of 9.6.42. The conjoint effect of these two notices is that within the wards now specified, all works costing more than £100 or ten times the net annual value, whichever is the less, should be submitted to the Commission. In the remainder of the area of the County Borough of Bath, all works costing more than £1,000 or ten times the net annual value, whichever is the less, should likewise be submitted to the Commission.)

COUNTY BOROUGH OF SWANSEA.—An area comprising St. Thomas Ward. (5.3.43.) (To be read in conjunction with the orders of 19.8.41 and 7.8.42. The conjoint effect of the three notices is that within the Alexandra, Castle, and St. Thomas Wards all works costing more than £100 or ten times the net annual value, whichever is the less, should be submitted to the Commission. In the remainder of the area of the County Borough of Swansea, all works costing more than £1,000, or ten times the net annual value, whichever is the less, should likewise be submitted to the Commission.)

#### Areas in which no work (other than temporary work) may be put in hand without prior submission to the Commission.

BOROUGH OF WEYMOUTH.—The area known as Chapelhay, comprising (1) the hereditaments known as Nos. 1 to 24, inclusive, Hope Street ; and (2) all the hereditaments in the area bounded by the centre line of the following streets :—On the north, North Quay, Trinity Road and Cove Row ; on the east, that part of Hope Street which lies between Cove Row and Hope Square, and Spring Road ; on the south, Rodwell Avenue ; and on the west, Rodwell Road. (6.11.42.)

ROYAL BOROUGH OF KENSINGTON.—1. Rackham Street area, comprising the hereditaments known as Nos. 1-61 (inclusive) Rackham Street.

2. Portobello Street area, comprising all of the hereditaments in the area bounded by the centre line of the following streets :—On the north, Lonsdale Road (that part between Portobello Road and Colville Road) ; on the east, Colville Road (that part between Lonsdale Road and Westbourne Grove) ; on the south, Westbourne Grove (that part between Colville Road and Portobello Road) ; on the west, Portobello Road (that part between Westbourne Grove and Lonsdale Road). (20.11.42.)

A plan of the Kensington areas has been deposited and may be inspected at the local Town Hall.

URBAN DISTRICT OF CLACTON.—An area comprised by the hereditaments known as :—Nos. 23 to 41 (odd numbers inclusive) Station Road ; Nos. 32 to 44 (even numbers inclusive) Station Road ; Arcade Buildings, Station Road ; Nos. 43 to 67 (odd numbers inclusive) Rosemary Road ; Nos. 46 to 70 (even numbers inclusive) Rosemary Road ; Tivoli Theatre, Rosemary Road ; Suttons Garage, Rosemary Road ; Nos. 1 to 11 (odd numbers inclusive) High Street ; Nos. 4 to 12 (even numbers inclusive) High Street ; No. 2 The Grove ; No. 15 Colne Road. (26.2.43.) A plan of the Clacton area may be inspected at the local Town Hall.

## THE INSTITUTE'S APPEAL

The following is the twenty-third list of donations received up to 9 March 1943 in response to the appeal issued to all members and honorary members and students on 16 December 1938.

Members who are contemplating making an increased payment of subscription, whereby the amount of the increase will be payable to the appeal fund, are reminded that if they are prepared to enter into an agreement for the payment of such increased subscription for a period of seven years or more they will be entitled to deduct income tax at the standard rate from the amount by which the subscription is increased.

Full particulars were published in the issue of the JOURNAL for 6 February 1939 and can be obtained on application to the Secretary, R.I.B.A.

DONATIONS		£ s. d.
Owen Eaton [F.] and C. H. Merrifield [A.]		(second donation) 2 12 6
Annie E. Hall ..	..	1 1 0
A. W. R. Kendrick [A.] (fourth donation)	..	1 1 0
Colonel M. K. Matthews [F.] ..	..	2 12 6
S. Natusch [A.] (fourth donation) ..	..	2 2 0
A. G. Quibell [Ret. L.] (third donation) ..	..	2 2 0
Thomas E. Scott [F.] ..	..	3 3 0
John R. Smith [L.] (second donation) ..	..	3 3 0
Leonard G. Stokes [F.] ..	..	3 3 0
R. J. Tall [Ret. A.] ..	..	1 1 0
W. J. Werry [A.] (fifth donation) ..	..	0 10 6

DONATIONS FROM R.I.B.A. ALLIED SOCIETIES		£ s. d.
Hampshire and Isle of Wight Architectural Association (balance of rebate of members' subscriptions for 1940)	..	0 5 3
Norfolk and Norwich Association of Architects (balance of rebate of members' subscriptions for 1940 and 1941 and rebate for 1942)	..	15 8 0
Royal Society of Ulster Architects do. do. ..	..	5 19 8
Northants, Beds and Hunts Association of Architects do. ..	..	24 3 0
Institute of Southern Rhodesian Architects ..	..	8 8 0

The donations and increased subscriptions or contributions received and promised and bank interest up to 3 March 1943 represent a total of £7,532 13s. 11d. This amount does not include increase of subscriptions or contributions promised for which no definite period is stated.

## MEMBERSHIP LISTS

### ELECTION : APRIL 1943

An election of candidates for membership will take place in April 1943. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Saturday, 10 April 1943.

The names following the applicant's address are those of his proposers.

### AS HON. ASSOCIATES (2)

**COX** : HERBERT ARTHUR, F.C.A., F.S.A., "The Builder," 4 Catherine Street, Aldwych, W.C.2 ; 22 Campden Road, South Croydon, Surrey. Proposed by the Council.

**HOWLING** : GEORGE JEFFERY, "The Builder," 4 Catherine Street, Aldwych, W.C.2 ; 126 Queen's Road, Wimbledon, S.W.19. Proposed by the Council.

### AS FELLOWS (4)

**GREGSON** : SYDNEY [A. 1934], County Architect, County Hall, Newport, Isle of Wight ; "Keighley," Staplers Road, Newport. Vernon Aldridge, John Greaves and H. H. Clark.

**PEARSON** : CHARLES EDWARD [A. 1932], 18 Dalton Square, Lancaster : "Hawesgarth," Slyne Road, Bolton-le-Sands, Carnforth. C. B. Pearson, Ernest Prestwich and A. T. Nicholson.

And the following Licentiates who have passed the qualifying Examination :—

**BOLLINGER** : CHARLES ADOLPHE, Messrs. Frigidaire, Ltd., 401 Edgware Road, Hendon, N.W.9 ; 34 Barnhill Road, Wembley Park, Middlesex. Lieut.-General Sir John Brown, O. H. Collins and S. G. Jeeves.

**FOREMAN** : HERBERT EDWIN, "Newlyn," Orchard Avenue, Windsor, Berks. E. S. Smith, C. B. Willcocks and A. B. West.

### AS ASSOCIATES (30)

The name of a school, or schools, after a candidate's name indicates the passing of a recognised course.

**BRANGSDROVE** : CHARLES ALFRED [Final], 13 Hazel Close, Whitton, Middlesex. H. W. Matthews, Frederick White and L. A. Chackett.

**BRITTAIN** : THOMAS ARNOLD [Special Final Examination], 14 Pike Hill, Burnley. J. H. Gibbons, C. W. Box and Samuel Taylor.

**CARTER** : MISS GILLIAN RUTH (Architectural Association), The Abbey Mill House, St. Albans, Herts. Frederick Gibberd, Julian Leathart and A. W. Kenyon.

**CARTER** : GORDON ERNEST [Final], 102 Tower Gardens Road, N.17. Joseph Addison, E. C. Scherzer and R. F. Reekie.

**CLIFTON** : PHILIP ERNEST [University of London], 6 Field Terrace Road, Newmarket, Suffolk. L. S. Stanley, Professor A. E. Richardson and H. O. Corfatio.

**COLES** : ROBERT JOHN, B.Arch.(Hons.) (L'pool) [University of Liverpool], 11a St. Andrew's Road, Plaistow, E.13. Professor L. B. Budden, B. A. Miller and H. Thearle.

**COOK** : ALAN DENN [The Polytechnic, Regent Street, London], Hill House, Tumblers Hill, Swaffham, Norfolk. Joseph Addison, R. F. Reekie and J. K. Hicks.

**COOKE** : LESLIE [Special Final Examination], c/o 7 Crich Avenue, Littleover, Derby. H. T. Sudbury and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**DAVIES** : THOMAS LESLIE [Special Final Examination], "Harwood," 263 Bois Moor Road, Chesham, Bucks. A. F. C. Bentley, Alfred Forrester and Paul Badcock.

**DOBSON** : ROGER [Final], 35 South Parade, Great Crosby, Liverpool, 23. G. J. Bell, T. W. T. Richardson and Arthur Harrison.

**DOUGLAS** : ALAN, Dip.Arch.(Edin.) [Edinburgh College of Art], 4 Hampton Place, Edinburgh. Leslie Grahame-Thomson, W. I. Thomson and F. C. Mears.

**DOUGLAS** : JAMES ARTHUR [Final], 7 The Brambles, Woodside, Wimbledon. C. J. Mole, J. B. F. Cowper and W. A. Ross.

**DRAPER** : ERIC WILLIAM [Final], 48 Thurlow Road, Leicester. A. F. Bryan, M. W. Pike and W. J. Prince.

**DUPREE** : MRS. JOANNE GWENDOLEN SHIRLEY [Architectural Association], Avilion, Millbank Avenue, Portstewart, Co. Derry, Northern Ireland. Frederick Gibberd, Julian Leathart and A. W. Kenyon.

**EASTON** : FREDERIC ROY [Special Final Examination], 54 Longford Avenue, Southall, Middlesex. Alfred Forrester, Paul Badcock and R. E. Enthoven.

**EMPSALL** : RAYMOND [Special Final Examination], 30 Kingsbrook Road, Bedford, Beds. Eric Morley, Col. H. W. Barker and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**GAULDIE** : WILLIAM SINCLAIR [Final], "The Ha'en," Invergowrie, Dundee. C. G. Soutar, P. H. Thoms and W. Salmon.

**HOGG** : THOMAS WILKINSON DUNKLEY [Special Final Examination], 143 Sandwell Road, Handsworth, Birmingham, 21. Hurley Robinson, J. B. Surman and H. M. Lawrence.

**HOOPER** : DAVID VINCENT [Final], 45 Chamberlain Street, Wells, Somerset. Joseph Addison, J. K. Hicks and E. C. Scherzer.

**HUGHES** : WILLIAM NORMAN [Special Final Examination], Borough Surveyor's Department, Town Hall, Wallington, Surrey. F. D. Ward, F. E. Wapshot and H. H. Jewell.

**JACKSON** : ALEX WALTER [Final], 54 Grove Avenue, Yeovil, Somerset. Professor L. B. Budden, H. Thearle and G. W. Jackson.

**JOHNSTON** : JAMES SCOTT [Final], 23 Glenthorn Road, Jesmond, Newcastle-on-Tyne, 2. R. G. Roberts, R. N. Mackellar and P. C. Newcombe.

**LLOYD** : SIDNEY JOHN [Final], 22 Stourcliffe Close, Stourcliffe Street, W.1. - Thos. E. Scott and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**LYNHAM** : GEORGE ALLIN [The Technical College, Cardiff], "Fernleigh," Heol-don, Whitchurch, Cardiff. Harry Teather, A. G. Lynham and E. C. M. Willmott.

**MARRIOTT** : GEORGE HENRY GORDON [Final], 9 Strafford Gate, Potters Bar, Middlesex. S. G. Jeeves, A. T. Scott and Stanley Hamp.

**NUNN** : LESLIE WATSON [Special Final Examination], "Brendon," Wellin Lane, Edwalton, Notts. L. C. Brewill, C. E. Howitt and A. E. Eberlin.

**PRICE** : PHILIP JOHN [Special Final Examination], 15 Kenyon Mansions, Queen's Club Gardens, W.14. H. W. Weedon, H. W. Hobbs and J. B. Surman.

**READ** : JACK WINTER [Final], 378 Hill Lane, Southampton. H. J. White, C. W. Box and Ernest Bird.

**ROBERTS** : FRANK HENRY [Final], 4 Hillcrest Road, Great Barr, Birmingham, 22A. J. B. Surman, George Drysdale and Herbert Jackson.

**WHITE** : CYRIL GEORGE [Special Final Examination], 31 Newlands Avenue, Thames Ditton, Surrey. Alfred Forrester, Paul Badcock, and R. E. Enthoven.

### AS LICENTIATES (25)

**BACON** : FRANCIS, Ash Mead Cottage, Denham, Bucks. Basil Oliver and the President and Hon. Secretary of the Berks, Bucks and Oxon Architectural Association under the provisions of Bye-law 3 (a).

**BENNETT** : ALFRED EDWIN, 97 Heavitree Road, Exeter. 45 Powderham Crescent, Exeter. J. Challice and the President and Hon. Secretary of the Devon and Cornwall Architectural Society under the provisions of Bye-law 3 (a).

**BRITTON** : GEORGE ALEX PAYNE, 28 Eccleston Square, S.W.1. "North Lodge," Cheveley Road, Newmarket, Suffolk. G. W. Knight, R. W. Pite and G. E. Nield.

**CLARK** : HERBERT ANTHONY, Borough Engineer and Surveyor's Department, Hackney Borough Council, Town Hall, Hackney, E.8 ; 1 Belsize Park, Hampstead, N.W.3. F. M. Kirby, H. R. Chantler and S. C. Clark.

**DAVID** : ARTHUR SAMUEL, Neath Rural District Council Offices, 13 Orchard Street, Neath. Ty'r Odyn, Neath Road, Tonna, Neath, Glam. E. Smith, E. D. Jones and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**DICKINSON** : GEORGE HENRY, Borough Surveyor's Department, Guildhall, Grantham ; Somerby House, Somerby Hill, Grantham. F. J. Lenton and the President and Hon. Secretary of the Sheffield, South Yorkshire and District Society of Architects and Surveyors under the provisions of Bye-law 3 (a).

**DOMINY** : JOHN NEWELL, Station Road, Sutton Bonington, Loughborough ; Holmelea, Sutton Bonington, Loughborough. A. Thorpe and the President and Hon. Secretary of the Nottingham, Derby and Lincoln Architectural Society under the provisions of Bye-law 3 (a).

**DORIN** : THOMAS GRIFFITH, 52 Stratford Road, West Bridgford, Nottingham. Prof. R. A. Cordingley and the President and Hon. Secretary of the Northern Architectural Association under the provisions of Bye-law 3 (a).

**GORTON** : MAURICE GEORGE, P.A.S.I., Frome Buildings, London Road, Stroud, Gloucestershire ; c/o M. E. Neale, Esq., Rodborough Avenue, Stroud, Glos. C. W. Yates, A. L. Iredale and C. L. Jones.

**GREEN** : ARTHUR RONALD, c/o H. V. Lobb, Esq., 19 The Butts, Brentford, Middlesex ; 74 St. Thomas' Road, Spalding, Lincs. H. Lobb, W. E. N. Webster and A. E. Batzer.

**HAMILTON** : HUMPHREY ALLEN, c/o H. F. Stewart, Esq., 116 Kensington High Street, W.8 ; 42 Ormonde Court, Putney, S.W.15. J. W. Hepburn, L. M. Gotch and R. Wilson.

**HAMMOND** : GORDON HENRY, 58 Grosvenor Street, W.1 ; 74 Copers Cope Road, Beckenham, Kent. W. L. Clarke, B. W. L. Gallan-naugh and J. Leathart.

**HARVEY** : HUGH, Bridgegate, Irvine, Ayrshire ; "Bracmar," 16 Annick Road, Irvine, Ayrshire. J. Armour, W. Cowie and J. Houston.

**HILL** : ROBERT SHARPE, 22 Sydenham Avenue, Belfast. K. Edwards, R. S. Wilshire and J. R. Young.

**HUNT** : WILLIAM ALFRED, 5 Colne Road, Winchmore Hill, N.21. A. E. Biggs and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**KEATLEY** : ROBERT AUBREY, Air Ministry ; 26 Manor Green Road, Epsom, Surrey. J. Petter, A. Forrester and P. Badcock.

**LYNAM** : WILLIAM ARTHUR TATTON, Council Offices, Clay Cross, nr. Chesterfield ; 32 Bestwood Park, Clay Cross. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

**MARTIN** : IVAN CHARLES, M.O.W.P., Cleland House, Page Street, S.W.1 ; 1 The Close, Potters Bar, Middlesex. E. W. Armstrong, T. S. Tait and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**MATTHEWS** : RICHARD KIRKPATRICK, Westminster Chambers, Nantwich, Cheshire ; Moorsfield House, Audlem, Cheshire. Richard Matthews, E. H. Edleston and Richard Holt.

**RILEY** : ROBERT WILLIAM, Flat No. 6, "Seafield," 51 South Road, Weston-super-Mare, Somerset. G. H. Sale, W. R. H. Gardner and applying for nomination by the Council under the provisions of Bye-law 3 (d).

**RUSE** : ARTHUR WALTER, Civil Building Control, Ministry of Works and Planning, Bristol ; "Brasenose," 72 Falcondale Road, Westbury-on-Trym, Bristol. A. L. Farman, A. G. Shoosmith and A. F. French.

**SLIPPER** : REGINALD OWEN, P.A.S.I., The International Tea Co., Mitre Square, E.C.3 ; "Dornays," Harrow Road, Wembley, Middlesex. J. S. Beard, H. Lidbetter and R. W. H. Vallis.

**SYKES** : MAJOR WILFRED ELSWORTH, F.S.I., Ruskin Buildings, Scale Lane, Hull ; 6 St. John's Avenue, Bridlington, East Yorks. P. M. Newton, W. B. Wheatley and C. D. Allderidge.

**TURNER** : WILLIAM JOSEPH ELLIS, 24 Castle Gate, Newark ; Mill House, Fiskerton, Newark, Notts. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

**WORT** : WILLIAM ALFRED, P.A.S.I., Architect and Surveyor's Department, New Scotland Yard, S.W.1 ; Owlstone Croft, Tudor Avenue, Worcester Park, Surrey. G. M. Trench, Howard Robertson and A. G. MacDonald.

#### ELECTION : FEBRUARY 1943

The following candidates for membership were elected in February 1943 :—

#### AS FELLOWS (6)

**BOWDEN** : GORDON EVERARD [A. 1931], Chester.

**HENRY** : MAJOR GEORGE AUSTYN [A. 1934], Armagh, N. Ireland.

**HOWARD** : WILLIAM FREDERICK [A. 1934], Edinburgh.

**ROBERTS** : HUGH DUCKWORTH [A. 1935].

**YORKE** : FRANCIS REGINALD STEVENS [A. 1936].

And the following Licentiate who is qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925.

**ELLIS** : WILLIAM, J.P., St. Helens.

#### AS ASSOCIATES (13)

**DAITSCH** : MISS THERESA, Cape Town.

**DEVANEY** : JOHN JOSEPH GERALD, B.Arch., Dublin.

**FOX** : JOHN BERNARD, B.Arch. (N.U.I.), Kells, Co. Meath.

**GILLING** : MALCOLM GLYNN, Dip.Arch. (L'pool), Birkenhead.

**HOPKINS** : RICHARD EDWARD GODFREY, B.Arch. (Rand), Johannesburg.

**HOUNSELL** : MISS JEAN BURWOOD, Leicester.

**INGLIS** : IAIN WALKER, Dip.Arch. (Edinburgh), Edinburgh.

**NANDWANA** : LAKHJAI KALABHAI, Ahmedabad, India.

**NORTHCROFT** : MISS ANNA HOLMES.

**RUSHTON** : ROY FREDERIC.

**WAINWRIGHT** : KEITH, Cardiff.

**WALKER** : FREDERICK ARTHUR, Winnipeg.

**YOULDON** : EDWIN BURNETT, B.Arch. (Witwatersrand), Johannesburg.

#### AS LICENTIATES (33)

**BALDWIN** : JOHN STANLEY.

**BARNES** : WILLIAM HENRY, Brecon.

**BROUGH** : ROBERT WILLIAM, Hove.

**BURN** : SIDNEY, Newcastle-on-Tyne.

**CROOKS** : WILLIAM, Blaydon-on-Tyne.

**DAVIES** : HYWEL SCOTT, Chester.

**DICKINSON** : LESLIE, Bradford.

**DICKINSON** : WILLIAM, Bradford.

**EASTWOOD** : GEORGE, Burnley.

**GILL** : FRANK, Cambridge.

**HEATON** : FRANK HALLIWELL, Salford.

**HOLE** : WILFRED EDGAR Barry.

**HUNTER** : JAMES, Aberdeen.

**KING** : HAROLD FRANK, Cambridge.

**LARTER** : CLAUDE EUSTACE.

**LAWRENCE** : WALTER WILLIAM.

**LEWIS** : RONALD THOMAS, Burslem.

**MCCULLOCH** : DUNCAN, Glasgow.

**MESTON** : FREDERICK WILLIAM, M.C.

**OVERTON** : SIDNEY NORMAN, Bournemouth.

**POOLE** : CLARENCE ARTHUR.

**POTTS** : ALEXANDER ROBERT BALLIOL, Southport.

**RAMAGE** : HERBERT.

**RANDALL** : WILLIAM EDWARD RENWELL, Chatham.

**RUSBY** : ALLAN, Halifax.

**TAYLOR** : LESLIE LAMB, Newcastle-on-Tyne.

**TEMPLE** : COLONEL FREDERICK CHARLES, C.I.E., V.D., Newcastle-on-Tyne.

**TIDY** : EDWARD ALBERT.

**TILBURY** : JOSEPH FREDERICK, Cambridge.

**WEBBER** : RICHARD ALAN, Clydebank.

**WHEELER** : EDWARD, Newcastle-on-Tyne.

**WILLIAMSON** : SYDNEY, Wakefield.

**YOUNG** : HORACE JOHN, Gateshead-on-Tyne.

## MEMBERS' COLUMN

#### DISSOLUTION OF PARTNERSHIP

MR. CHARLES E. ELCOCK [F.] and MR. FREDERICK SUTCLIFFE [F.], lately of Britannic House, Finsbury Circus, E.C.2, have dissolved their partnership as from 27 August 1942. Mr. Charles E. Elcock will continue to practise individually from his new temporary address—2 Bedford Square, W.C.1. Telephone No. : Museum 2183.

Mr. Frederick Sutcliffe has accepted for the time being an appointment with the Ministry of Works, and will continue to practise from "Hatton Cottage," Lubbock Road, Chislehurst, Kent. Telephone No. : Imperial 831.

#### PARTNERSHIPS AND PRACTICES

The practice formerly carried on by the late Prof. R. M. Butler, R.H.A. [F.], at 82 Merrion Square, Dublin, will in the future be continued by his son and daughter, Mr. John G. Butler, B.Arch., M.R.I.A.I., [A.], and Miss Eleanor Butler, B.Arch., M.R.I.A.I., [A.], who have both been associated with the practice for some time.

The practice will be carried on at the same address and under the name of "R. M. Butler & Co."

OPENING for experienced partner in old West London practice with a view to gradually taking over.—Reply Box 3343, c/o Secretary R.I.B.A.

BRIGHTON. Old-established Architect and Surveyor's Practice for disposal [L], F.S.I. Central offices ; complete equipment, lucrative. Principal died suddenly.—Box 1133, c/o Secretary R.I.B.A.

#### APPOINTMENT

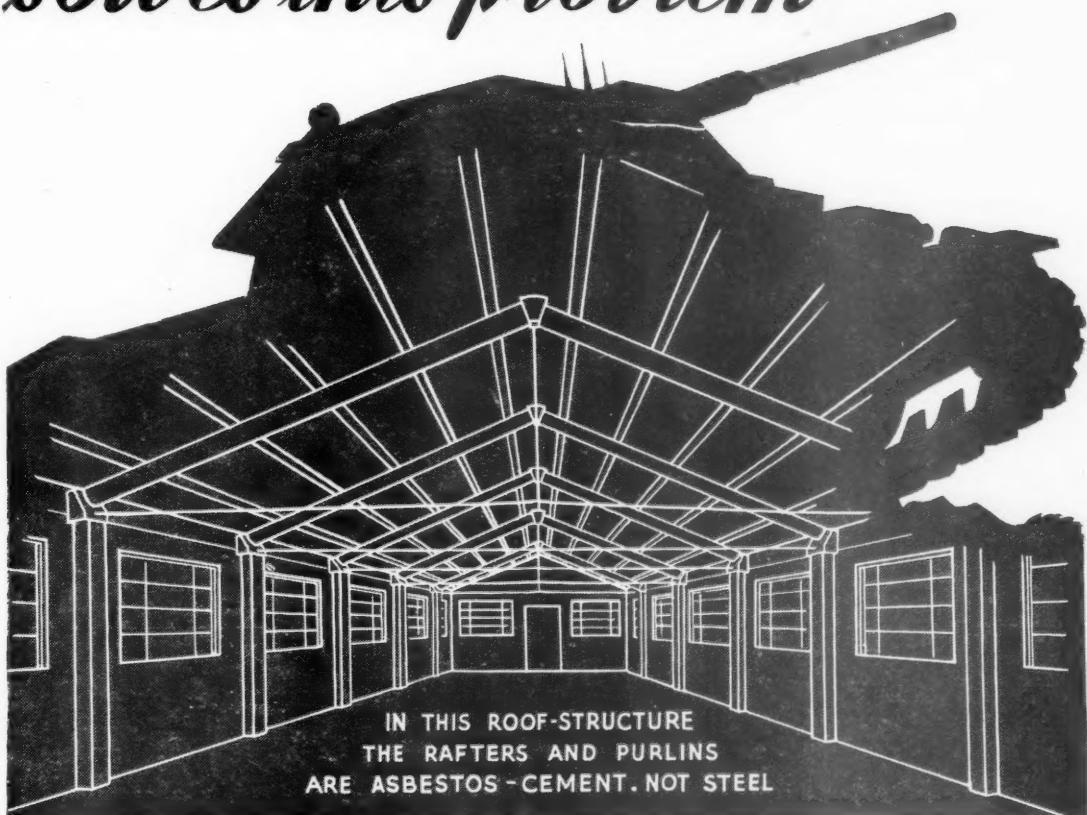
MR. LEONARD A. REYNOLDS [F.] has been appointed County Architect to the East Riding County Council and will still continue in private practice at 3 Ladygate, Beverley, Yorks, as hitherto.

#### WANTED

MEMBER wishes to purchase a copy of Atkinson and Baggenal : *Theory and Elements of Architecture*.—Reply Box 8243, c/o Secretary R.I.B.A.

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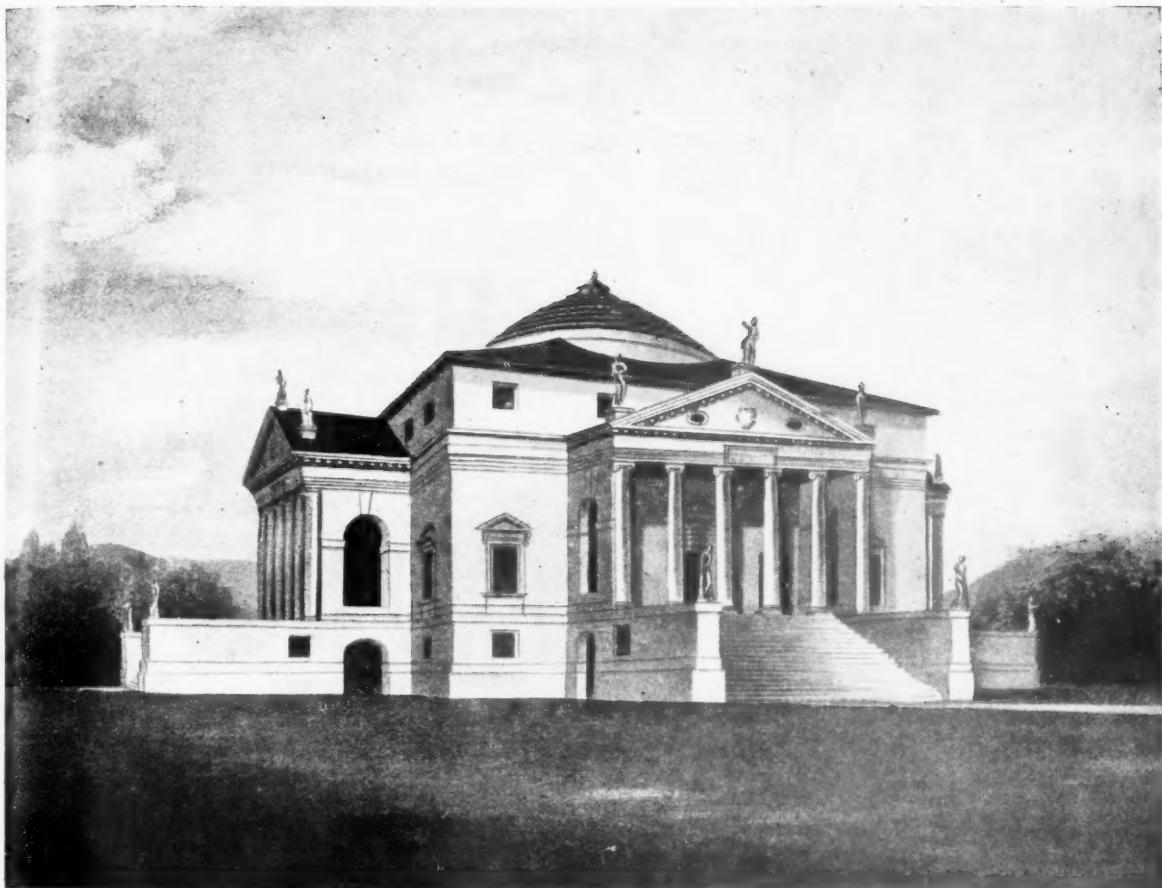
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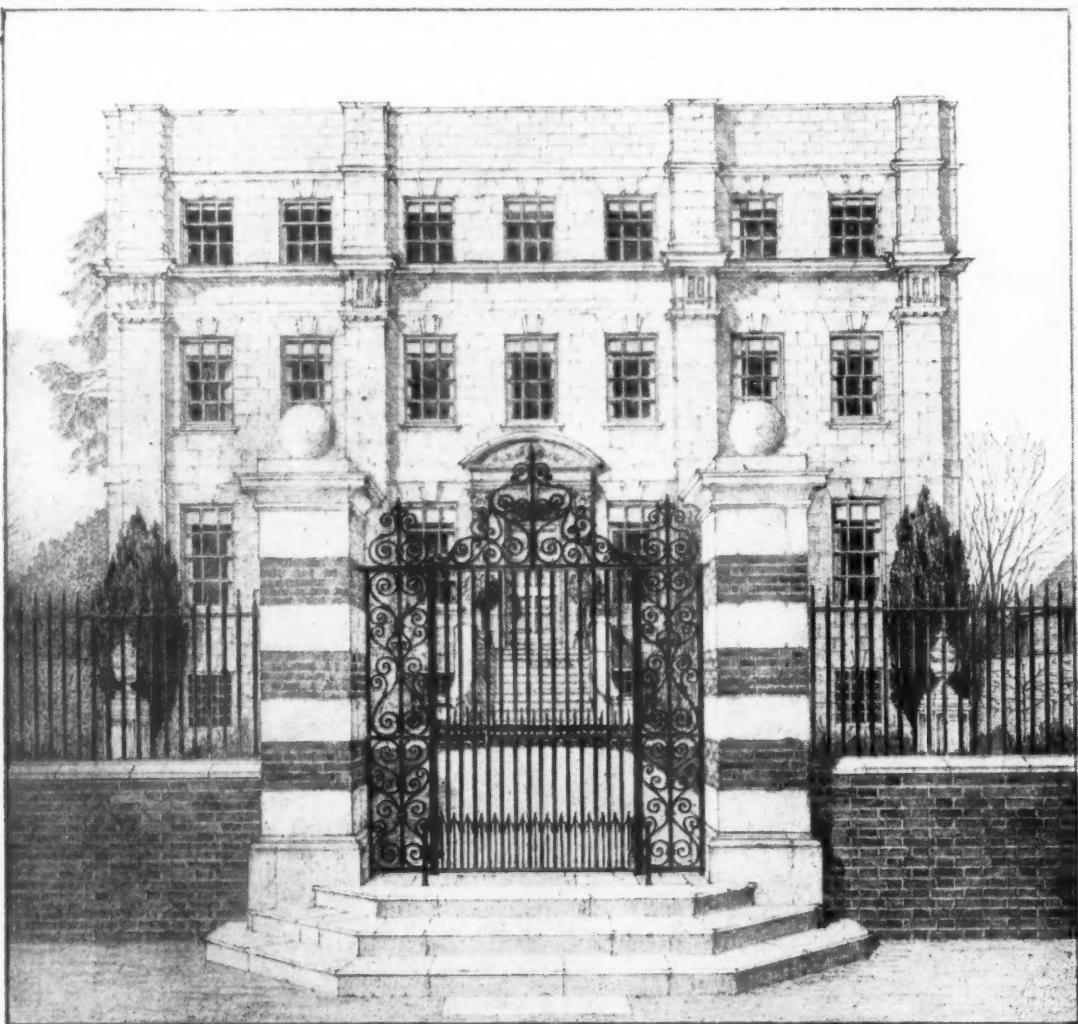
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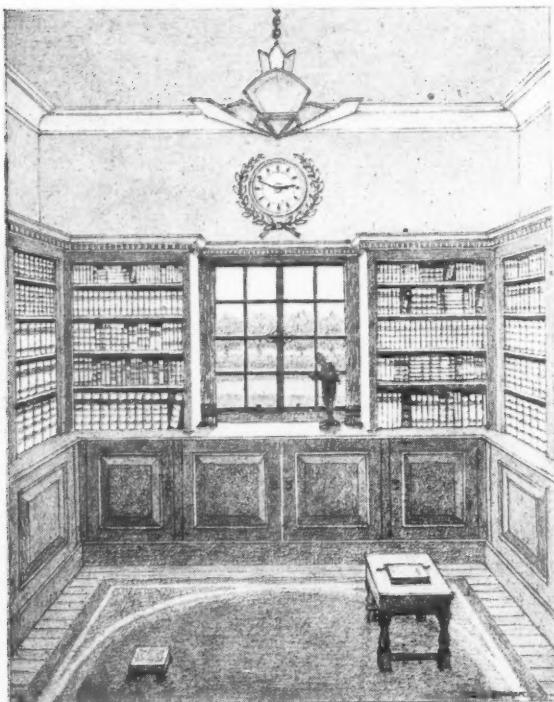
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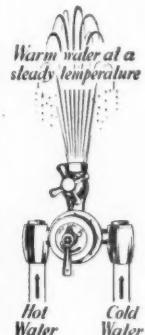
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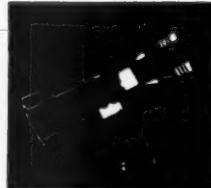
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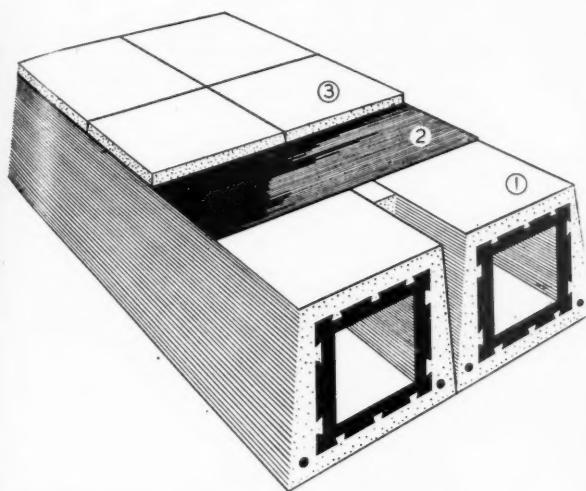
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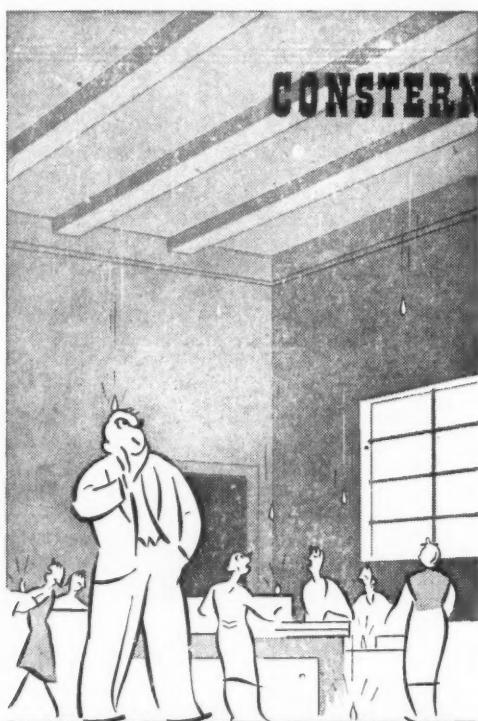
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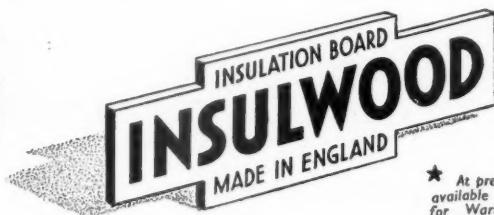
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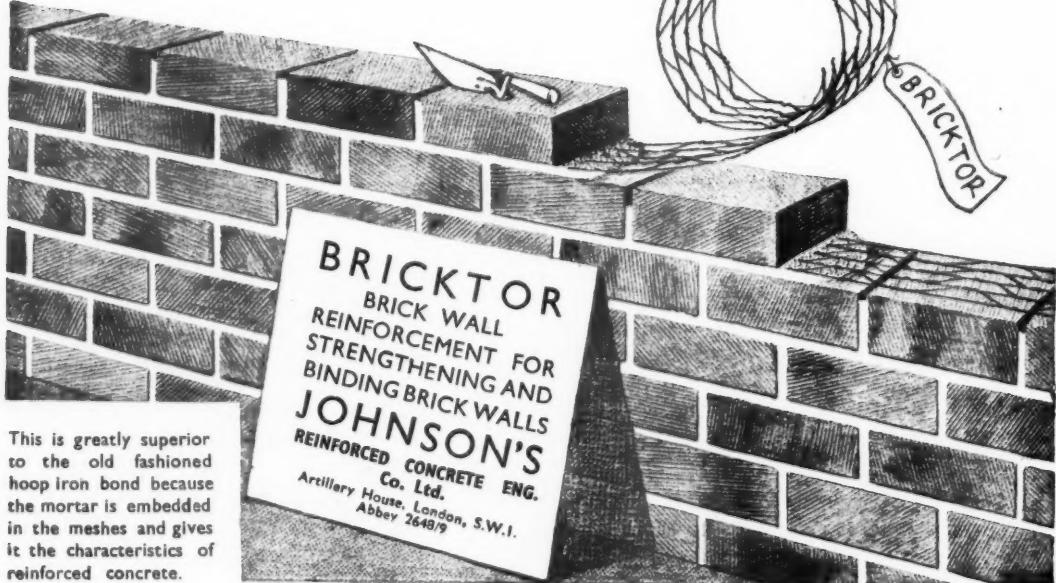
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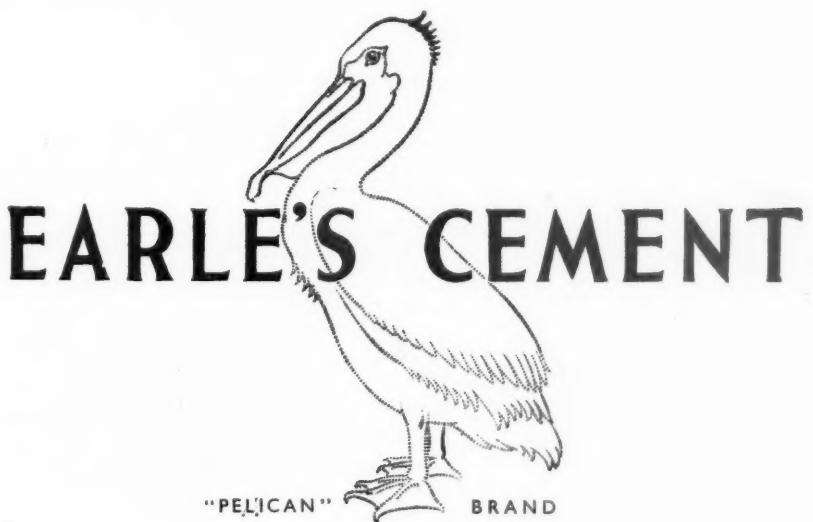


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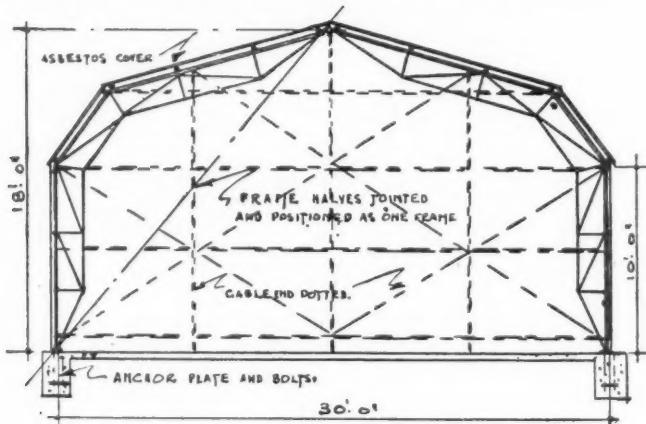
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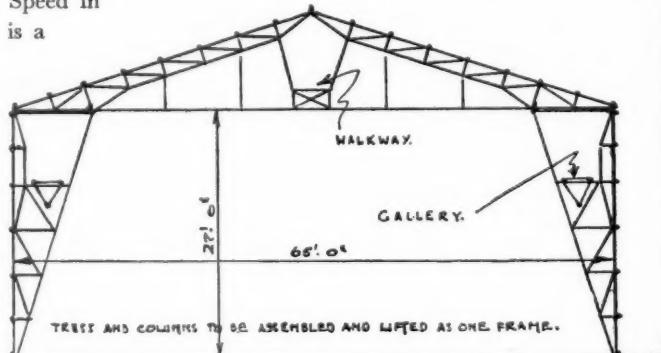
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